

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

#### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

#### **About Google Book Search**

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/

## HARVARD UNIVERSITY



LIBRARY OF THE
GRADUATE SCHOOL
OF EDUCATION

. •

.



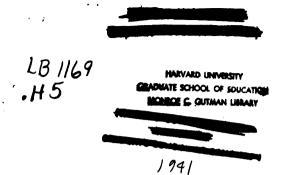
# A KINDERGARTEN COURSE FOR THE INDIVIDUAL CHILD AT HOME

BY

V. M. HILLYER, A.B. Headmaster of Calvert School, Baltimore

8

THE BAKER & TAYLOR COMPANY
PUBLISHERS



COPYRIGHT, 1911, BY
THE BAKER & TAYLOR COMPANY
Published January, 1911

## To MY MOTHER

			,
	·		
			(
-			

### CONTENTS

													1	PAGE
Preface .		•	•		•	•	•			•	•			9
Introductio	N.									•				13
GENERAL IN	STRUC	TIO	NS				•							17
GENERAL MI	ETHOD	•											•	23
DAILY LESSO	N8, 1	TO	120										27-	-121
LESSONS FOR	Тна	7K8	GIVI	NG	TIM	Œ								122
Lessons for	CHRI	8TL	IAS '	Гім										124
Lessons for	SAIN'	r V	ALE	NTI	NE's	D	<b>A</b> Y				•			132
Lessons for	Wasi	IIN	GT01	8 <sup>'</sup> 1	Bir	THD	A¥			•				135
Lessons for	Сніг	p's	Bir	THI	PAY	•								139
Undirected	Wor	K										•		142
Appendix -	MATI	ERI	ALS ]	NEC	CESS.	ARY	FOR	TH	E (	Covi	RSE			151

•		

#### PREFACE

A child who has reached the age of four or five seems to demand some kind of "busy work" and almost any makeshift is usually resorted to in order to provide occupation for him. More often than not, such occupation takes the form of instruction in his A, B, C's, long before he is ready or fitted for it; but, as Froebel says, "The A, B, C of things must precede the A, B, C of words," and the kindergarten exactly fills this need, providing instead of haphazard work and play, systematic training of the child's powers and faculties.\* As the successful man is one who "does things," so also is the successful child one who "does things."

Although there is no doubt of the great value of kindergarten training for every child, yet on account of the inaccessibility of good kindergartens in all but the largest cities, the difficulties in the way of sending small children out to school, the expense, etc., comparatively few can avail themselves of the advantages and privileges that such a training affords. It is therefore

<sup>\*</sup> Popular expressions such as "powers and faculties," though not strictly psychological, have, for the sake of simplicity, been used throughout the book.

#### PREFACE

to bring the kindergarten to the child in his own home that the following pages are written.

The task thus set is in some respects manifestly impossible by the nature of the case, as the central idea of the kindergarten is social, not individual, and yet, in spite of this, many of the kindergarten activities by some adaptation and elimination can be made applicable even to a single child. The games and songs that take an important place in the kindergarten's activities, for the most part can only be employed successfully with a number of children and are therefore here omitted and. likewise, the "Mother-Play," for in spite of its name it presupposes an appreciation of the symbolic which the average mother does not possess and being the most metaphysical of all the kindergarten activities, needs a teacher with a deep insight into Froebel's ideas to rightly interpret it. On the other hand, however, maternal instinct may usually be relied upon to do the right thing where a method based on a philosophical system might go wrong. Nature, or evolution, or whatever it may be, has mercifully provided the means for arriving at its proper ends without a conscious method. Mother-Play, therefore, such as "Falling, Falling," "Birds in a Nest," "The Little Gardener," "The Knight and the Good Children," etc., finds its counterpart in the romping, cuddling and traditional finger plays like "Pat-a-cake," "Pease-porridge-hot," "This-little-pig-

#### PREFACE

went-to-market," etc., which it is assumed most mothers know and employ without any conscious appreciation of their deeper significance.

Though many kindergartners will consider it little short of sacrilege to tamper in any way with the inspired teachings of their prophet, this attitude is certainly mistaken, for there is no sense in depriving parents of half a loaf simply because they cannot have a whole. What the child loses, however, from lack of association with his fellows is in part at least offset by the compensating advantages which are found in the individual attention, interest and care which a single child receives.

As a child so situated will hardly have more than a year of such work at best, the lessons are planned for the year preceding regular school work, that is, for a child five to six years of age, and the course is designed so that a minimum of special kindergarten apparatus will be required and the expense be moderate.

A list of materials needed is given in the Appendix. The few special supplies that cannot be obtained about the home or locally may be secured from the kindergarten houses mentioned.

				-	

#### INTRODUCTION

It is not the purpose of this book to go into the theory and philosophy of the kindergarten as such information might be more embarrassing than helpful, yet in order that the parent may intelligently carry out the instructions which are given in the following pages, a very brief explanation of kindergarten methods and principles is first necessary.

Possibly the two most characteristic words which give the key to the kindergarten idea are "Gifts and Occupations." Friedrich Froebel, the originator of the kindergarten, designed a progressive series of objects:balls, blocks, tablets, sticks, etc.; which are called "gifts," from the fact that they are given the child for directed play and from which he is to obtain both concrete and abstract ideas of form, color, motion, size, direction, number, etc. These ideas are to be gained by directed play with the "gifts" and by arranging them in various orders to represent concrete objects-"forms of life" as they are called—such as houses, bridges, cars, tables, soldiers, etc., and in abstract color and form designs-called "forms of knowledge" and "forms of The "occupations" are forms of constructive beauty."

#### INTRODUCTION

work with different materials,—needle and thread, paper and paste, mats and strips, etc., with which the child is to make various concrete objects and abstract designs. In short, he is to be taught "to do things" and to "learn by doing."

There are about ten gifts and as many occupations, though some kindergartners have added more; and the distinction between the two is not always clearly drawn. Strictly speaking, the gifts are those objects which do not lose their original form by use but may be employed over and over again, such as beads, blocks, rings, etc. The occupations, on the other hand, give to the material a fixed form, such as modeling, painting, weaving, etc. The gifts are arranged in the order—solids, surfaces, lines and points—from the whole to its parts (analytical); the occupations in the reverse order—pricking, embroidery, paper cutting, modeling—from the parts to the whole (synthetical). Some of them, however, are not as practicable or valuable as others, especially in the hands of the untrained teacher, and hence are here well omitted, as they do not justify the expense of the special "apparatus" necessary. For instance, the first gift consists of half a dozen worsted balls of as many different colors suspended from a frame by colored strings. The chief ideas to be obtained from this gift are provided for in the ball play which—unintelligent if you like—it may be safe to say every child has had, the ball

#### INTRODUCTION

being the first, the simplest and the most universal toy of childhood. The second gift consists of three blocks—a sphere, cube and cylinder—and most of the lessons to be learned from these are gained in the lessons with the enlarged beads which are made in these shapes. The third, fourth, fifth and sixth gifts consist of different shaped blocks for building, and the ordinary building blocks which almost every child possesses—heretical though it may be to say so—answer somewhat the same purpose.

			ı

In all kindergarten work some fundamental principles should be most carefully observed. These principles should not be considered mere prefatory platitudes. They are the most vital things in kindergarten training and on whether they are observed or neglected depends the value of the course. If the mother accepts them passively and hastens on, if she does not take them deeply to heart, the child may come through the kindergarten course worse off than he entered, but that will not be the fault of the kindergarten, nor of the child, but the crime of the teacher in neglecting just what is here put first and distinctly labeled that there may be no mistake nor excuse for any.

The kindergarten forms habits—habits of work and habits of mind. If the following principles are rigorously inculcated the habits will be good, if not they will be bad. It is obvious that no habits are better than bad ones, hence, better no kindergarten than a kindergarten in which these principles are not followed.

1. Obedience: The child should be taught habits of obedience, instant and unquestioning. Don't listen to

persuasion, argument nor excuses. Don't temporize, threaten nor repeat.

- 2. Order: Each day he should set everything in order and put away each thing in its proper place after finishing.
- 3. Neatness: He should keep all his work spotless. Clean hands are necessary. Smudged, soiled or crumpled work should be done over.
- 4. Accuracy: He should always be required to be as accurate and exact as the limitations of his age and skill will permit. If careless or slipshod work is accepted, the teacher will get nothing else and it will grow worse.
  - 5. Industry: Not listless nor aimless activity.
  - 6. Concentration:

"One thing at a time and that thing done well Is a very good rule as many can tell."

The entrance of the cat, the fall of a book, the ring of the door-bell should not be allowed to distract his attention from the matter in hand.

7. Investigation: The inquiring state of mind natural to the child should not be discouraged, and the parent should not be too quick to assume that his spontaneous flow of questions is all idle. When, however, he has asked a question, he should be made to answer it himself, if by a suggested train of thought he can be led to

do so, or to wait for and understand the answer if given him.

- 8. Originality, Invention, Imagination: Imitation is the natural first stage but a "copy-cat" he should not remain. The kindergarten child who said enthusiastically that his head was "just busting with inventions" had entered into the proper spirit of the work.
- 9. Truthfulness: Children are naturally liars in the sense that they naturally make-believe. Do not discourage their romancing, but have them offer their fairy tales as fairy tales and not as deceptions.
- 10. Independence: It is much easier to help the child than to help him to help himself. With a touch here or a stroke there the teacher could instantly set him straight or get him out of many a difficulty, but she should restrain her itching fingers and make it a matter of pride with him to be able to say, "I did it all myself."

If these principles are borne in mind and observed, the course given in the following pages will not only be Work and Play, the Work will be Play and the Play will be Work—work of a kind which makes character and a solid foundation for future education.

The child's work and play should be of two kinds—the first *Directed*, the second *Undirected*.

The *Directed Work* and play should take place at regular daily periods, as suggested below, and during such periods the mother should follow Froebel's motto,

"Come, let us live with our children." If she can give the whole of such time to the child, so much the better, but she should at least introduce him to what is to be done and keep a supervising eye on his work thereafter. Indeed, the proper way is for her to work out each lesson herself as directed, before giving it, as well as with the child while giving it. She will then be prepared for any difficulties and obstacles that may arise.

If you do not possess a child's table and chair, saw off legs of a stand or table and a chair to child's size. The table should be about 22 inches high, the chair about 12 inches. The top of the table should be marked into inch squares by scoring horizontal and vertical lines with a knife an inch apart, or better still, covered with oil cloth already marked into squares. This may be obtained from the kindergarten houses mentioned in the Appendix.

Have child observe a definite program each day, say  $\frac{1}{2}$  hour or more at 9 o'clock for directed work and play; then an hour intermission, then another  $\frac{1}{2}$  hour or more of directed work.

The plans of directed work are given in the following daily outlines, and as a rule each lesson takes up one gift and one occupation. As the lessons are finished they should be checked off to keep track of the point reached and to show what has been done. They should be taken up in order as they are progressive in difficulty,

one thing from each of the series of gifts and occupations being completed and then the series repeated, with a little more advanced work each time. In this way the games and occupations never grow stale, as the same kind of work is not repeated too often, and then a new and advanced phase is taken up, so that the child progresses in skill and develops in power.

In this connection it may be remarked that it is never safe to take any knowledge for granted or assume that the child knows even the simplest thing he may be supposed to know. A searching cross questioning will often uncover the most unbelievable ignorance. Such elementary notions as right and left, square and oblong, opposite and over, may be understood but then again they may not be. Ask the child to open the left hand drawer of your desk or point to all the square things in the room and you may have a surprise. "Of course he knows, or ought to know" you will say, but does he? Many grown-ups are hazy as to what a cylinder really is.

The start of each day's lesson should be a review by question and answer of the points brought out in the preceding lesson and also the one similar in the preceding week. If some of the occupations, such as weaving and sewing, cannot be finished at one sitting, they should be completed, not on the next day, but the next time this occupation is given in the lesson outlines. If the child

is very young, some of the work may have to be postponed till he is older or more developed, and such omitted work should be left unchecked and returned to later. On the other hand, some of the checked work may prove so interesting that the child may be ready and willing to repeat, which is, of course, allowable. But the mother should resist the temptation to pick and choose, especially out of the order, or for the reason that one gift or occupation is less interesting than another. is a valuable lesson for the child to learn that he must take the lean with the fat, the work as well as the play. The regular lessons should, however, be interrupted for the special occasions for which lessons are provided at the end, and these lessons for Thanksgiving, Christmas, St. Valentine's day, Washington's birthday, and the child's own birthday substituted.

THE method of presenting the work as outlined is suggested for the first lessons to give the idea for conducting them and those that follow. Children and conditions vary so widely that it would be useless or worse to give the precise method for every lesson.

In general the lesson should take the form of a conversation between the parent and child, not merely directions by the former. By question and suggestion the child should be encouraged to draw strongly on his imagination and tell a story as he plays. In all the play with the gifts, other than abstract designing, he should be encouraged to imagine the things he arranges represent something in real life, no matter how crude or far fetched the resemblance may be. This, indeed, is what he will naturally do, for a child's imagination will invest the most sordid thing with vital interest. The old astronomers who saw in the stars likenesses of men and animals and named the constellations the "Great Bear," "Orion," "The Bull," were little children in this. Everyone knows the finger play in which while you illustrate you say, "Here is the church and here is the steeple, open the door and see all the people." This is the idea

the pupil should be encouraged to carry out in his play with the gifts. For instance, "Here is a line of soldiers marching two and two and here is the captain in a red coat; here comes the band in blue coats and here are the wagons," etc., all made out of the sticks and This is to develop his imagination and language sense and is of the greatest importance. The highly literal modern toy, in which nothing whatever is left to the imagination, is very pleasing for a time, but lacking in educational value. It stunts the growth of the imagination, as there is no opportunity nor incentive given for its development and, through lack of exercise, that faculty becomes atrophied. If the child in later life is to find "tongues in trees, books in the running brooks, sermons in stones," if he is to think deeply, see below the surface, originate and invent, this is the time and way to make the beginning. Genius has been defined as the ability to imagine things that do not exist, and certainly wit is nothing but unexpected flashes of the imagination in seeing associations that are not obvious.

Besides developing his imagination this method should also train his language sense and provide opportunity for forming proper habits of speech. The indiscriminate use of the word "it" to indicate a cube, a sheet of paper, or any other object with a specific name, and makeshift expressions like "thing-a-ma-bob," "this-a-way" should be strictly tabooed. Such expres-

sions are either the result of lazy mindedness or ignorance. The former should not be tolerated, the latter should be enlightened. Neither should the parent avoid the use of apparently difficult words so long as the ideas for which they stand are clear. It is all very well to use expressions like "standing up" and "lying down" when first describing vertical and horizontal lines, but the specific terms are no more difficult to learn once the idea is understood than words like "yesterday" or "to-morrow," for which we should not think of substituting such cumbersome expressions as "the-day-before-this-day" or "the-day-after-this-day."

From the foregoing and the first developed lessons which follow, the method of procedure should be understood so that, except in special cases, it will only be necessary in succeeding lessons to give the outline of the work to be done, leaving the parent to supply the conversation and other life-giving details, without which the skeleton is nothing but dry bones.

A word of caution may not be out of place. Withal, the teacher's attitude should be sensible and virile. There is too much of a tendency among kindergartners to sentimental maunderings about "little birdies" and "dear little ones" and the use of such diminutives and terms of endearment. "Little" and "Dear" are the two most overworked words in a certain kind of kindergarten course and kindergarten literature, and this per-

haps, more than anything else, has brought the kindergarten into disrepute and made it a subject of too often merited jokes. To the masculine mind at least "a dear little triangle" and "little Mr. Cube" are simply idiotic driveling. The teacher should be sympathetic without sentimentality, the pupil self-respecting, not silly.

The Undirected Work and Play is provided for in the last chapter which suggests all sorts of activities not entering into a regular kindergarten schedule and these games and occupations the child may take up at any time. A child's interests are naturally fickle and transitory, and he will soon tire of the most elaborate toy. The secret of keeping up interest is contained in this injunction, "Never give him more than one thing at a time and do not even tell him of the next till all the possibilities of the first are exhausted." Save your ammunition; husband your resources. In this way his interest may be kept ever fresh and new.

#### LESSON 1.

1. Take the large wooden colored "beads" made in second gift shapes, that is, in the form of spheres, cubes and cylinders, and distribute them in three boxes putting all of one shape in each box. (Form of beads).







In this lesson give child the box of spheres and ask him to pick out a red bead (say "a ball") with his right hand, then another red bead with his left hand, and so on, using the hand he is directed to use and so distinguishing between the right and left till he has taken all the red beads out of the box. This is to drill him on right and left and the color red. Each of the colors is taken up and studied one at a time and then in combination. As he picks them out ask him what other things are the same color. For instance, he might say fire, a rose, his lips, ribbon, rubies, etc. Let

his thoughts wander for a moment over the whole universe, picking out fantastic as well as obvious things that are red, but have him bring his mind back to the matter immediately in hand the instant he is told to do so (obedience). Then ask him to string all the red balls to form a "necklace" which he may wear hung about his neck when completed. Call the beads rubies; and like Solomon or an Eastern potentate he may dazzle the household with his crown jewels.

2. Give the child a piece of clay and have him divide it into pieces about the size of a bead. Then have him roll each piece in his hands to make a lot of spherical beads (preliminary notion of the simplest and yet most complete of solid forms). These he can readily convert into cherries by inserting a piece of match stick in each or better still a bit of twig.

#### LESSON 2.

1. By way of review of points brought out in preceding lesson, ask child questions about right and left and red, then give him the box of cubical beads and ask him to pick out all the yellow beads as directed in preceding lesson. Ask him what other things are yellow, as was done in the case of the red. Then ask him to string all the yellow cubes to form a necklace of topazes. Ask him what difference he finds between

the behavior of these beads and the spherical ones (investigation). He will notice that the little cubes are not as elusive as the spheres, they do not roll off the table but "stay put."

2. Give the child a piece of clay the size of an egg and have him roll it into as perfect a ball (sphere) as he can (accuracy), while you make one at the same time. Ask him questions about it and have him also ask questions while he is modeling the ball into shape, -"What other things are round (spherical) like a ball?"—an orange, the sun, etc. Then, asking him to do as you do, raise the ball above the table and drop it, flattening one side slightly. Then have him pat the top of the sphere with his fingers, then press the right side flat, then the left and finally the front and back to form a cube. Avoid touching his cube as much as possible and have him follow the directions as you tell him, so that he may learn to know the meaning of right and left, top and bottom, front and back (direction). Ask him what things have a similar shape—a box, a house, a lump of sugar, etc.

#### LESSON 3.

1. Review the color yellow and differences between spheres and cubes, etc., learned in preceding lesson. Then give the child the box of cylindrical beads and

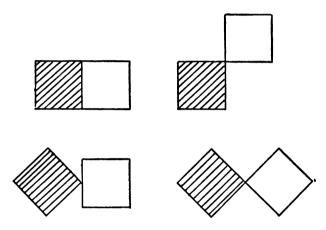
ask him to pick out all the blue cylinders. Ask him what other things are blue, as directed in lesson 1. ask him what difference he finds between the behavior of these beads and the spherical and cubical beads he has already had. He will notice that these beads poured out on his table do not run away as much as the balls but, on the other hand, are not as steady as the cubes—in other words that they seem to be related to both the spheres and cubes in the way they behave. Have him notice which ones roll—those resting on their curved face, and which stand still—those resting on their flat face, and he should then see that the cylinder. like the sphere, has a curved face and hence will roll like the sphere when it rests on this face, but that it also has two flat faces like the cube and hence will act like the cube-stand still-when it rests on either of these faces. Have him string all the blue cylinders—rollers -to form a necklace of sapphires.

2. Give the child a piece of clay the size of an egg and have him first form it into a sphere, then by rolling it on his table in one direction till elongated and flattening the ends make it into a cylinder. Ask him what things have a similar shape—a drum, a mug, a rolling pin, etc.

#### LESSON 4.

1. Review the color blue and the characteristics of the cylinders related to the sphere and cube, learned in preceding lesson.

Then give the child the box of tablets (seventh gift), and ask him to pick out a square. Ask him how this is different from the cube. Make a fresh cube of



clay and cut a thin slice off one side. The child will see that the square is really one face of a cube. Ask him what other things in the room are square, and have him distinguish between square and oblong. Ask him how many corners it has and how many edges. Then give the child 2 square tablets, both dark or both light, counting them out as you do so—"one, two." Ask him how many squares he has, then what other things he

has two of—2 eyes, 2 ears, 2 arms, 2 legs, etc. (first ideas of number). Tell him that these are called "pairs" but two tablets are called a "couple." Ask him to name other things that are couples but not pairs. Ask him to arrange the tablets on his table in as many different positions as he can. Some of the possible arrangements are shown on page 31.

Work alongside of him for the present, making the designs with your own set of materials, and having him copy (imitation), as long as he has no ideas of his own, but encourage him to originate and make his own arrangements (invention) as soon as possible. Then have him do the same with 3 squares and save the best design.

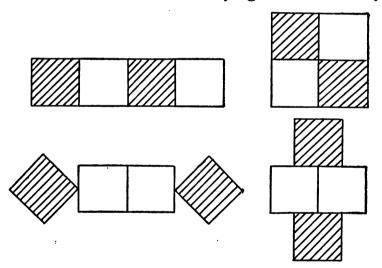
2. Give the child the box of gummed parquetry papers and have him pick out 8 squares, one red, one yellow and one blue. Tell him that these are the 8 most important colors and are therefore called "first" (primary) colors.

Ask him what they are made of—paper—and what paper is made of—usually of wood pulp. Great forests are being cut down and ground up to make paper for newspapers, magazines and books. The finer writing papers are made of linen rags. Ask him to arrange them in the centre of a mounting sheet in the form preserved above, then paste, being very careful not to soil nor discolor the right side of the parquetry

in pasting nor the mount (neatness). Tell him if he does it very carefully indeed, he might give it to his father or grandmother (thought of others).

## LESSON 5.

1. Review the points learned in preceding lesson and then pick out for yourself 4 square tablets, 2 light and 2 dark, counting them out as you do so and have the child do the same for himself. Ask him how many dark ones he has, then how many light, and how many



altogether. Ask him to arrange these squares in as many "forms of beauty" (designs) as he can, making the same design yourself either before, at the same time as, or after him and save the best.

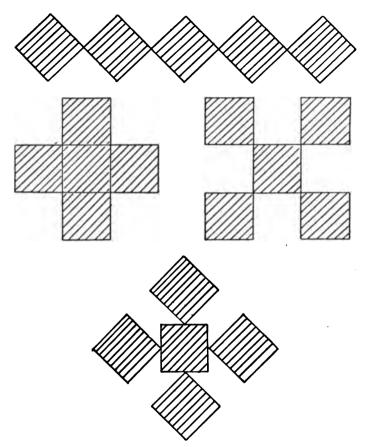
2. Give the child the box of parquetry papers and ask him to pick out 2 yellow squares (light) and 2 blue squares (dark), arrange them in the centre of a mounting sheet in the form preserved above and paste. Ask him how paste is made—of gum from the sap of a tree or, usually, of flour and water boiled together.

## LESSON 6.

1. Continue to review the preceding lesson each day without further direction.

Pick out 5 square tablets all dark, counting them out as you do so and having the child do the same. Ask him to arrange these squares in as many "forms of beauty" as he can. Make the first two suggested below, then ask him to suggest other variations, and follow his lead. He should early be taught what is known as the law of balance or symmetry (or Opposites) in "forms of beauty"—that is, that the right and left side should be similar, or the top and bottom, or both. This he may learn by being told always to keep the opposites alike; when he adds to one side always to add in a similar way to the opposite side. Ask him which of the arrangements he likes best and save it for putting into a permanent form in the parquetry.

2. Give the child the box of parquetry papers and have him count out five blue squares, arrange them in



the centre of a mounting sheet in the form preserved above and paste.

# LESSON 7.

1. Give the child the bundle of sticks (eighth gift), mixed together, and ask him to select one. Ask him

what the stick is made of; where the wood comes from; what other things are made of wood; what other things resemble the stick—a match, a cane, a pencil, etc. After such conversation ask the pupil to separate the long and short sticks into piles (ideas of size).

2. Give the child the box of crayons and have him draw a group of red lines (pile of sticks); group of yellow lines, and a group of blue lines.

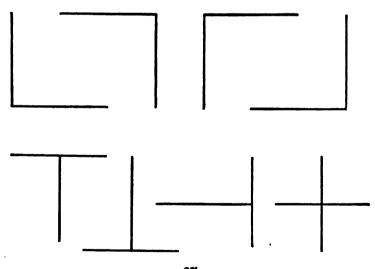
#### LESSON 8.

- 1. Give the child the sticks and ask him to select one. Ask him how it differs from a tablet. The tablet will cover a square on the table, the stick only a line; the tablet has a surface, the stick only an edge. Have him then pick out all the three-inch sticks and arrange them on his table in a row of "standing up" lines and tell him these are called vertical. Ask him what other things are vertical—himself when he stands erect, a chimney, a lamp post, a tree, a table leg, edge of a door, etc. Have him run his finger along all the vertical lines he can see in the room.
- 2. Give the child a pencil and ask him to draw a row of trees (vertical lines). Tell him the trees may be different heights and different distances apart but perhaps all in a line. Have him show this in his drawing. Then give him the box of crayons and ask him to draw a line

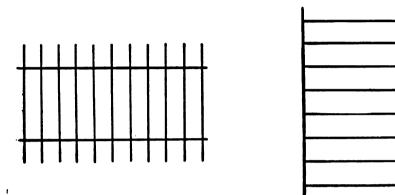
of soldiers, selecting the color, red, yellow or blue, giving reason for his choice, but tell him that soldiers look better if they are all the same size and the same distance apart.

## LESSON 9.

1. Give the child the sticks and ask him to arrange them end to end to make a "lying down" line and tell him that this is called horizontal. Ask him to name all the things he can think of that are horizontal,—himself when he is asleep, the floor, a telegraph wire, etc. Have him run his finger along all the horizontal lines he can see in the room. Have him arrange two sticks, one vertical and the other horizontal in as many ways as he can, thus:



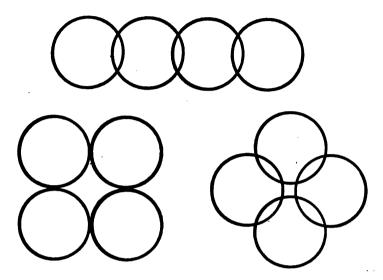
2. Have the child draw simple "forms of life" (concrete objects) that are made of both vertical and horizontal lines—a picket fence, and a ladder.



## LESSON 10.

1. Give the child the box of rings, halves and quarters, and ask him to take out a whole one. Ask him how this differs from a ball, a half dollar; what other things are shaped like it—a hoop, a bracelet, a halo, a finger ring, etc.; what it is made of; what other things are also made of iron—a shovel, a stove, steam engines, etc.; what is the difference between wood and iron—wood will burn, iron will not; wood will float, iron will sink (have him try it); iron will rust, wood will rot (have him recall instances and examples of each and tell why certain things are made of one or the other). This conversation may be made most interesting. Then ask him to count out

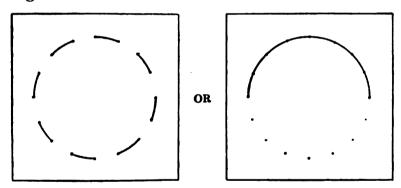
four rings and arrange them in "forms of beauty," as he did with the tablets.



2. Give the child a blunt needle threaded with red worsted and show him how to make a knot in the end or if very young make it for him. While preparing the materials, continue the conversation about iron and steel; ask him what the needle is made of, in what respect it resembles the rings, why it is not made of some other material, where steel comes from, etc. Allow him also to ask questions, as he will naturally do, usually without encouragement, but for the most part eliminate those that are irrelevant and teach him to stop short (obedience) when the next matter demands his attention. Such catechizing should not be one-sided—the parent should

ask some questions for the child to answer, the child should ask some questions for the parent to answer and, at times, both should answer their own questions.

Have him then take the needle in his right hand, the simplest card (the circle) in his left—make sure he knows his right from his left—and putting the point through a hole from the wrong side draw it through as far as the knot, then down the next hole, drawing it tight but not so tight as to break the worsted, then up the next hole and back down the second hole, and so on till half the design is completed. Or he may complete the circle without taking the backward stitch, showing disconnected dashes, then at the next lesson repeat, filling in the blanks on the second round.



LESSON 11.

1. Give the child the box of rings and ask him to pick out a half ring. Ask him to place it vertically and ask

him what it looks like—a crescent moon; then horizontally, hollow up—a bowl; then horizontally, hollow down—a hill. Then ask him to take out another half ring and put the two halves together to form a whole, then see in how many other ways he can arrange them, having him count the number.







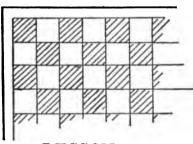
2. Have the child finish sewing the circle begun in preceding lesson. While doing so, discuss with him the nature and source of the worsted used: where it comes from—the wool of sheep; how it gets its color; what other things are made of wool, etc.

#### LESSON 12.

1. The last step in the series of solid, surface, line and point, or solid, face, edge and corner, is the lentil, a crude representation of a point, as the stick is of a line. Give the child the box of lentils and ask him how they differ from the stick and ring—probably the nearest explanation he can give is that the other gifts he has had are "spread out" while this is "altogether in one spot." Then ask him, as usual, what other things resemble the lentils—seeds of different sorts,—corn, peas, grains of

sand, rain drops, etc. Have him then lay the lentils on the holes of the second sewing card and then arrange them in the same way on the table without the card.

2. Give the child a weaving mat and "fringe" of yellow strips. The mats and "fringes" resemble each other but in the "fringe" the cuts go almost to the edge. Tear apart the strips of the fringe, place one in the patent weaving needle and weave the first strip over one, under one, alternately, across the mat. Weave the second strip first under one, then over one and so on across the mat. Then let him weave the third strip the same as the first and the fourth strip same as the second, and so on in a checkerboard design till the mat is one-half completed. All strips go under margin and are made fast when finished by pasting to the under side of margin.



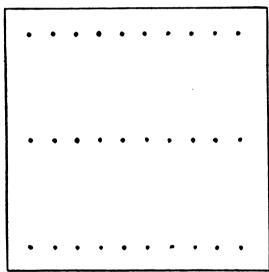
LESSON 13.

1. Have the child lay the lentils on the holes of the next sewing card, then arrange them in the same way on the table without the card.

2. Have the child complete the mat begun in the preceding lesson.

## LESSON 14.

1. Give the child the peg board and box of pegs. This furnishes a combination of the point and line. Have him make three horizontal parallel rows of pegs, the first red at the top edge of the board, the second yellow through the middle, the third blue at the bottom edge.

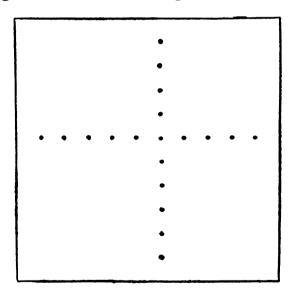


2. Give the child the paint box and brush, a sheet of heavy paper, a saucer or bowl of water and a piece of rag or blotting paper. Ask him to select one of the colors, red, yellow or blue, whichever he prefers to use.

Show him how to wet his brush, then work up the color on the cake of paint. Then ask him to paint inside the circle sewn in lessons 10 and 11. Discuss how the brush is made, of a goose quill and camel's or badger's hair for the finer brushes; of bristles or wood fibre for the cheaper.

# LESSON 15.

1. Have the child place a horizontal row of pegs through the centre of the peg board, then a vertical row crossing it in the middle, choosing his own colors.



2. Have the child work up the orange color paint in his brush. Ask him while he is doing so what the color

is called, telling him if he does not know, and asking him why it is called orange. Ask him as usual what other things have a similar color and then have him paint an orange, starting with a dot in the centre of his paper and enlarging it gradually and carefully till it has the size and shape he thinks an orange should be.

# LESSON 16.

- 1. Review the preceding lesson as usual and also the preceding week's lessons on color. Give the child box of beads; have him string the red spheres, then the same number of yellow cubes and likewise of the blue cylinders.
- 2. Give child piece of clay the size of an orange and have him divide it into three equal parts. While this is being done, ask him questions and have him do the same. What is clay made from? Rotted rock. What is made from clay? Bricks, flower pots and even china, by baking the clay.

"What handycraft can with our art compare!
For potts are made of what we potters are."

"Old Pottery."

Have him then roll one piece of the clay in the palms of his hands to form a sphere. Have him make another sphere of the second piece of clay and by patting it on opposite sides shape it into a cube, as directed in lesson 2.

Have him roll the third piece on the table in one direction and flatten the ends to make a cylinder.

These three forms taken together constitute the "Second Gift" shapes. Save.

## LESSON 17.

1. Review the preceding lesson as usual and also have the child again review the difference he found between the forms he studied in lessons 1, 2, and 3. Have him tell how many faces the sphere has and what kind (one round face) how many the cylinder has and what kind (3 faces, 2 flat and 1 curved); and how many the cube (6 flat faces), holding it in one position and touching each as he counts. Have him close his eyes and give him each of the three forms in turn and ask him to tell by the feel which it is. Do the same with a handful of the second gift beads.

Have him place the cylinder on top of the cube and the sphere on top of the cylinder to form a monument to Froebel. Has he ever seen a monument? Tell him that there is a large monument like this erected to Froebel, the originator of the Kindergarten. Ask him why he supposes it was made of these three forms, one on top of the other.

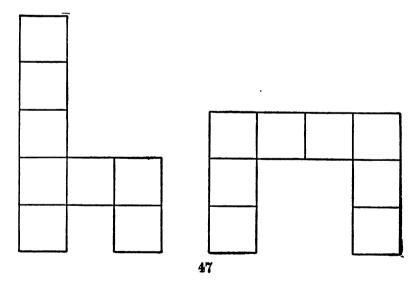
2. Have child model a sphere, then convert it into a spherical fruit—an apple, by flattening two opposite

sides, making a slight depression or dimple in each and inserting a short stem. Give him a real apple for a model, if possible, and discuss with him kinds of apples, how they grow, when ripe, uses, etc. Ask him what other fruits he can think of that are spherical.

## LESSON 18.

1. Review the preceding lesson as usual and from now on without further direction review each day the preceding week's lesson in the same gift and occupation.

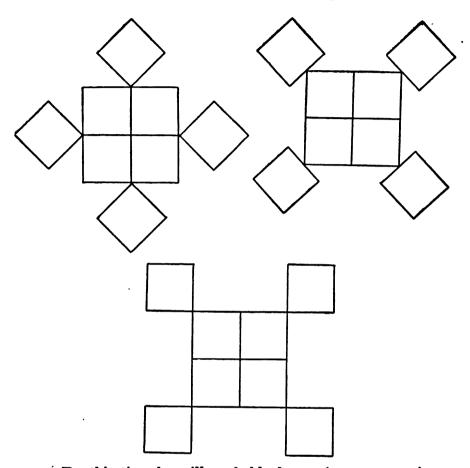
Give child 8 square tablets, all dark or all light, counting them out as you do so, and have him do the same. Ask him to arrange them to represent "forms of life," that is, concrete objects such as a chair, table, bed, arch,



- etc. At first it is the best plan for the parent also to make the objects the child makes, working along with him and having him imitate. As he gains in facility, however, have him plan more and more independently.
- 2. Have the child paste a horizontal row of red parquetry squares across top of a ruled mount, using great care in placing them straight and avoiding spots and smudges. Have him begin to paste a second row of orange squares across the middle and save for completion in next lesson.

## LESSON 19.

1. Count out 8 dark or 8 light square tablets and ask the child to do the same. Arrange these squares on the table to make "forms of beauty" (designs) and have the child *imitate*. The possible number of such designs with 8 squares is very large and these arrangements will not be exhausted in this lesson. It is rather best to start by arranging the 8 tablets in a horizontal row on the squares marked on the table, then in a vertical row leaving a space between each tablet, then in a row with the corners only touching, then with 4 squares placed together to make a large square and the other 4 arranged about them symmetrically, thus:



By this time he will probably be anxious to experiment and invent different arrangements for himself, and he should be encouraged to do so, but he should be careful to observe the "Law of Opposites," as described in lesson 6.

2. Have the child finish pasting row of orange squares

begun in preceding lesson, then paste a third row of yellow squares across the bottom. Tell him this is a sheet of what are called "warm" colors. Ask him if he can tell why. Ask him to name all the warm things he can think of that have these colors—fire, the sun, candle light, etc.

### LESSON 20.

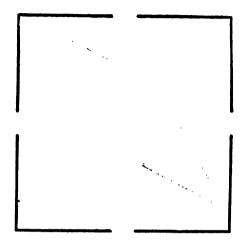
- 1. Have the child arrange the sticks in parallel vertical lines and parallel horizontal lines and tell him that such lines are called parallel. Ask him to name all the things he can that are parallel—gate posts (vertical parallel lines), a railway (horizontal parallel lines).
- 2. Have the child draw a row of candles with a pencil and make a yellow flame to each with the crayon.

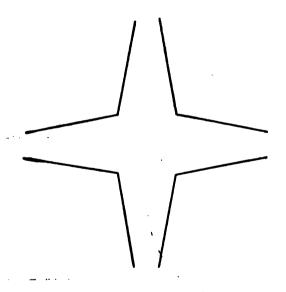
## LESSON 21.

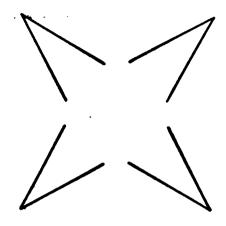
1. Give the child 8 sticks and have him separate them into two's. Then ask him to arrange each couple so that they will make the corners of a square. Tell him these are called right angles. Then have him arrange them to form blunt angles and finally sharp angles, as shown on pages 51 and 52.

Ask him to point out all the things in the room that have right angles, likewise blunt and sharp angles, respectively.

2. Have the child draw the angles he has made, using red, yellow and blue crayons.

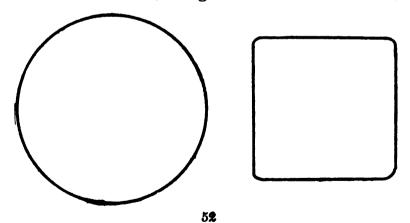


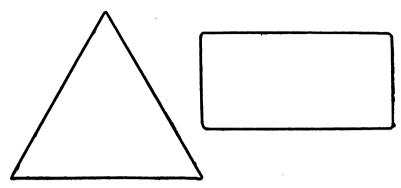




LESSON 22.

1. Give the child a piece of worsted about a foot long. Wet it in water, then have him, with the help of a stick, arrange it on his desk in "forms of knowledge" (geometrical forms), circle, square, triangle, oblong, etc. Ask him their names, telling him those he does not know,



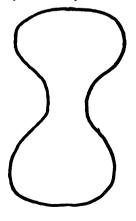


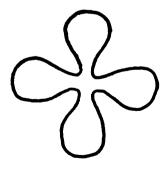
and have him mention all the things he can that have these forms.

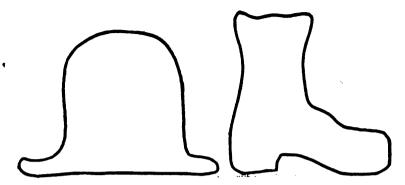
2. Have the child sew one-half of the next simplest card, as directed in the preceding sewing lesson, using an appropriate color worsted—red if an apple, yellow if a lemon.

# LESSON 28.

1. Have the child arrange the worsted, wet as described in preceding lesson, in "forms of life"—an hour glass, a flower, a hat and a shoe.





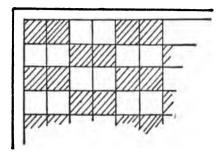


2. Have the child finish the sewing card begun in preceding lesson.

## LESSON 24.

- 1. Give the child the box of lentils and ask him to make designs on the squares marked on his desk, oil cloth or mounting card, as follows: Place a lentil at each corner of a square, place one at each corner of a group of 4 squares, place one also in the centre of each square, place them so as to cover the lines, making any forms of beauty he may invent.
- 2. Have the child weave one-half of a mat as follows, using yellow strips:

First strip over 2, under 2, and so on. Second strip under 2, over 2, and so on. Third strip same as first. Fourth strip same as second.



## LESSON 25.

- 1. Have child make a tile of clay about 4 inches square and  $\frac{1}{2}$  inch thick, making a circular flat cake first and cutting it square with a dull knife, then arrange on it lentils or, better still, bright colored berries or beans, in the best form of beauty made in lesson 24, pressing them into the clay to make a permanent design.
  - 2. Have the child finish mat begun in preceding lesson.

#### LESSON 26.

- 1. Have child arrange the red pegs in the form of a square on the peg board, then make diameters (a vertical and a horizontal row) of yellow pegs crossing it. Ask him how the square is then divided, what the spaces thus made are called (squares) and how many there are.
- 2. Have child place oak or maple leaf in the centre of a sheet of paper, and holding it down with his left hand draw around it with a pencil so as to make an out-

line of it on the paper. Have him make a number of such outlines and save the best for the next lesson.

## LESSON 27.

- 1. Have child arrange the blue pegs in form of a square on the peg board, then make diagonals (lines crossing corner to corner) of orange pegs. Ask him what the spaces thus made are called—triangles—and how many there are.
- 2. Tell the child he is to paint the leaf he has drawn in the preceding lesson and ask him what color he should use—green. Ask him as usual when a new color is introduced what other things are green—grass, grain, many kinds of vegetables before ripe, etc. Ask him what color different fruits turn when ripe and leaves before they fall.

## LESSON 28.

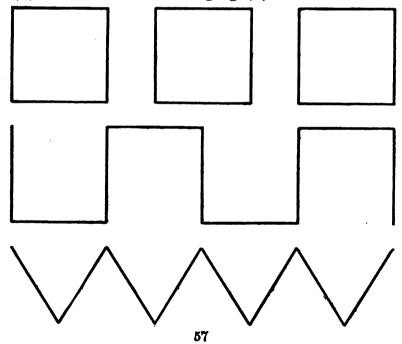
- 1. Have child string the beads in order—red sphere and green cube, alternately.
- 2. Have the child begin to model an ovoid or egg-shaped "sequence." Have him first model a potato from a real one before him. Ask him how potatoes grow—like oranges and apples? Have him put in the eyes and tell him that the farmer plants the eyes, from each of which another potato plant will grow.

## LESSON 29.

- 1. Give the child 8 square tablets and have him arrange them in forms of beauty different from those made in lesson 19.
- 2. Have child paste on the reverse side of mount made in lesson 19 a row of green circles at the top, of blue in the middle. Save.

## LESSON 80.

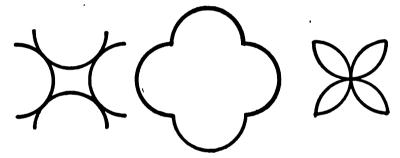
- 1. Have child arrange the red sticks to form squares
- (1); then yellow sticks into a "Wall of Troy" border,
- (2); then the blue into a zigzag (3). Save.



2. Have child draw on the ruled mount, first with red, then with orange and yellow, respectively, the above designs made with the sticks. He should follow the lines on the card and make the first at the top, the second across the middle and the third across the bottom.

## LESSON 81.

1. Give the child 4 half-rings and have him arrange them in as many different forms of beauty as he can.

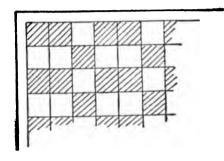


2. Have the child sew one-half the next card in order of difficulty with its appropriate color.

## LESSON 82.

- 1. Have the child lay lentils over the next sewing card unsewn, making the design as it is to appear when sewn, then have him make the same design on his table, without the card.
- 2. Have the child weave one-half a mat as follows, using blue strips.

First strip over 2, under 1, and repeat. Second strip, under 2, over 1, and repeat. Third strip, same as first. Fourth strip, same as second, and so on.



## LESSON 83.

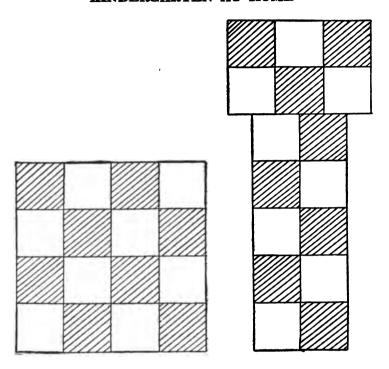
- 1. Have the child make a row of red pegs at the top of his peg board, then skip a row and make a row of orange pegs, and so on, making a row of each of the colors so far studied.
- 2. Tell the child that to-day you are going to let him paint a flower, a very sweet flower that grows in the woods in spring; a flower that is also the name of a girl and a color, and see if he can guess its name—"violet." Then have him make a dot of violet color on a sheet of paper and enlarge it irregularly to about the size of a violet. Have him finish it by drawing a stem with the green crayon. As in the case of the other colors, ask him what violet colored things he sees or can mention.

#### LESSON 84.

- 1. Have child string beads in order—red sphere and cylinder then orange sphere and cylinder and so on, yellow, green, blue and violet.
- 2. Continuing the ovoid sequence, have child model an egg, after first having made a sphere as a preliminary step. Have an egg before him while he is doing so, and call his attention to the difference in size of the two ends, which he should try to copy exactly. Tell him that solid objects shaped like an egg are called "ovoid," plane surfaces shaped like an egg are called "oval." Talk with him about eggs—where they come from, what they contain, what animals besides hens lay eggs—birds, frogs, fish, etc.

## LESSON 85.

- 1. Give child 16 square tablets, half light and half dark, and have him arrange them to represent some concrete object, such as a checkerboard, a chimney, a flight of steps, etc., as shown on page 61.
- 2. Have the child paste a row of violet circles at bottom of mount used in lesson 29. Tell him this then is a sheet of what are called "cool colors," blue, green, violet, and ask him if he can tell why. Ask him to name all the cool things he can think of that are either of these colors—the sea, shade, the sky after the sun has set, etc.

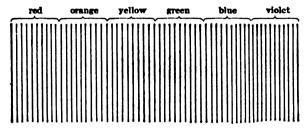


LESSON 86.

1. Has the child ever seen a rainbow? If you have a glass prism, let the sun shine through it to show the child the *spectrum* (artificial rainbow) it makes on the floor or wall. Have him first count the number of colors he can recognize, then name them in order, red, orange, yellow, etc.

Give child a bundle of colored sticks and ask him to arrange them in piles according to color, placing the piles in the color order of the rainbow—red, orange, yellow, green, blue, violet.

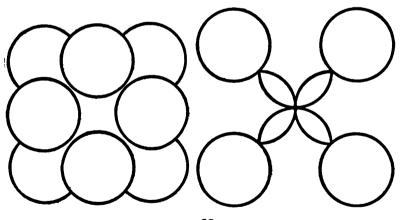
2. Have the child make a spectrum—a straight rainbow—with the different colored crayons by drawing



short, thick, vertical lines of each color close together. Be sure that he gets the correct order and have him learn their names in this order as this is the alphabet of colors.

## LESSON 87.

1. Give the child 4 whole rings and 4 halves and have him arrange them in as many "forms of beauty" as he can.



2. Have the child complete sewing the card begun in lesson 31.

#### LESSON 88.

- 1. Have the child arrange the lentils to form the design made by the holes of the next sewing card.
  - 2. Have the child complete the mat begun in lesson 82.

### LESSON 89.

- 1. Have the child make a "fence" around the peg board using one color of pegs and place trees, shrubs, etc. (pegs or pegs with beads put over them) inside the fence to form a garden or orchard.
- 2. Have the child place his left hand on a sheet of paper, the fingers together, the thumb extended, and draw around it. Then have him paint in the outline with red to form a mitten, being very careful not to go beyond the line. Ask him why mittens are often made red and see if he will remember that red is a "warm" color—not really of course but looks so. Ask him why mittens are warmer than gloves (the fingers lying together keep each other warm).

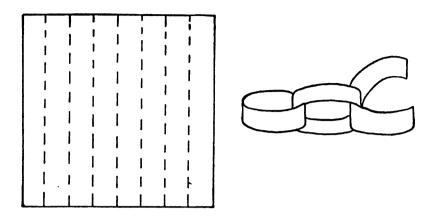
## LESSON 40.

1. Have the child string the beads in order, cube and cylinder alternately, using first all the red beads then all the orange and so on.

2. Have the child model a nest, first forming a sphere, cutting it in half through the middle and pressing a hollow in the flat side with the thumb, then have him make several small eggs and put them in the nest. Continue the talk in lesson 84-2 on eggs with a conversation about birds' nests (how made—of straw, hair, twigs, leaves, etc., and where placed—in trees, high up generally, but also in hollows of trees and even on the ground), laying the eggs, hatching, feeding the young, teaching them to fly, etc.

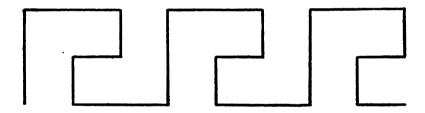
## LESSON 41.

- 1. Give the child 8 circular tablets and have him arrange them in forms of beauty around a centre.
- 2. Give child a sheet of red cutting paper about 6 inches square, and have him fold it once, edge to opposite edge, then a second time in the same direction, then a third time very carefully, keeping the edges even and creasing it with his finger nail. Have him open and tear it along the creases into 8 strips, or, if very young and unable to do this well, cut down the creases with scissors. Have him then bend a strip end to end till it laps, then paste. Have him insert, in the ring thus made, another strip and paste its ends together and so on with the remaining strips, forming a red chain of 8 links. Save.



## LESSON 42.

1. Have the child arrange a limited number of the sticks to represent a "Greek Fret" border.



2. Have the child, with help of the parent, make a blank calendar for a month as follows. Draw a checker-board of 5 rows of squares with 7 squares in a row by ruling vertical lines with pencil and crossing them with horizontal lines an inch or more apart. He should be careful to make them parallel, equidistant and unbroken.

If they are made the width of the ruler apart, measurements will not be necessary, the back edge of the ruler placed on the line already drawn gives the distance. He should take care also not to let his ruler slip. Write the days of the week above the columns and each day have the child observe the weather and indicate it in its proper square by pasting on the calendar a yellow circle of parquetry if the day is sunny, or drawing a black square if cloudy, or oblique lines if raining.

S	M	T	W	Th	F	S
<u> </u>						
<del> </del>						
	L					

## LESSON 48.

1. Give the child piece of worsted about a foot long. Wet it in water, then have him arrange it on his desk in

concrete forms of his own invention, such as a spoon, a pitcher, etc.



2. Have the child sew the next card in order of difficulty with an appropriate color or one of his own selection.

## LESSON 44.

- 1. Have the child arrange the lentils to form the design made by the holes of the next sewing card.
- 2. Have the child weave half of a checkerboard mat as described in lesson 12, but using alternate strips of red and green—complementary colors. The warm and cool colors are grouped into 3 pairs called "complementary" colors—they are red and green, orange and blue, yellow and violet.

## LESSON 45.

1. Have the child place pegs in the peg board from dictation, that is, from oral directions given him. Do not point nor show him what you mean but have him

do what you tell him. This is to teach him attention, the meaning of certain words of direction and how to follow oral instructions. Do this as follows: Say—"Put a red peg in the upper, right hand corner (wait till he does so), put a blue peg in the lower left hand corner, put a horizontal row of yellow pegs through the centre of the board." etc.

2. Have the child paint or draw with the appropriate colored crayon above the calendar made in lesson 42 an apple, an orange, a banana. If this is not suitable to the month for which the calendar is made other forms than those should be substituted.

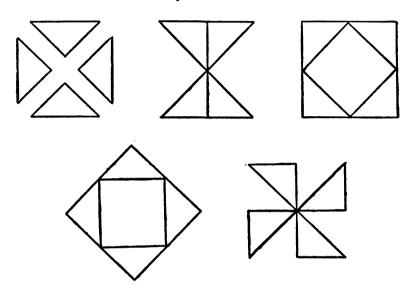
#### LESSON 46.

- 1. Have the child string the beads in order, sphere, cylinder, cube, using first all the red beads, then all the orange and so on.
- 2. Have the child model a lemon and color it yellow. Ask him what the shape of the lemon is, spherical or ovoid.

## LESSON 47.

1. Give the child a right angle triangular tablet and ask him to count the angles and tell him that triangle means three angles, then ask him which angle is a square corner and have him find out by trying the angles on the

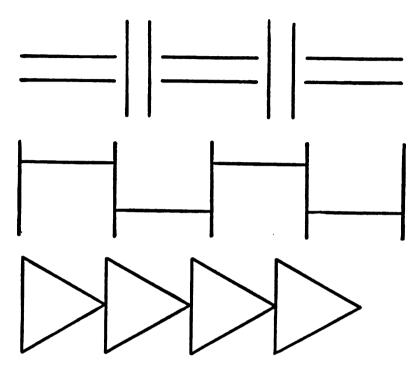
squares on his table. Tell him that such an angle is called a right angle. Then have him arrange 4 such tablets in forms of beauty as follows:



2. Give the child a sheet of yellow cutting paper and have him tear or cut it into strips and make a chain, as directed in lesson 41. Save.

# LESSON 48.

1. Have the child arrange the sticks to form borders of his own invention. Some of the possible arrangements are as follows:



2. Have the child draw a bunch of grapes using the blue or violet crayons.

# LESSON 49.

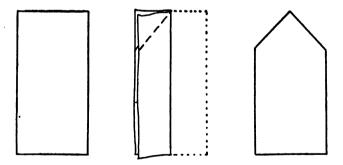
- 1. Give the child a whole ring, 4 halves and 4 quarters, and have him arrange them in as many different "forms of beauty" around a centre as he can.
- 2. Have the child sew the next card with an appropriate color or one of his own selection.

## LESSON 50.

- 1. Have the child copy design of next sewing card with lentils.
- 2. Have the child complete the mat begun in lesson 44 and review the fact that red and green are a pair of warm and cool colors that are called complementary.

## LESSON 51.

- 1. Have the child play teacher and dictate a design to be made with the pegs on the peg board by his mother, as directed in lesson 45.
- 2. Cut an oblong of paper about 8x6, then have child fold it lengthwise—a book—and cut off a triangular or curved piece from the unfolded corner, so that when opened the piece is shaped like a church window.



Have him wet it both sides with clear water, then mix red with his brush in the pan of the paint box and tak-

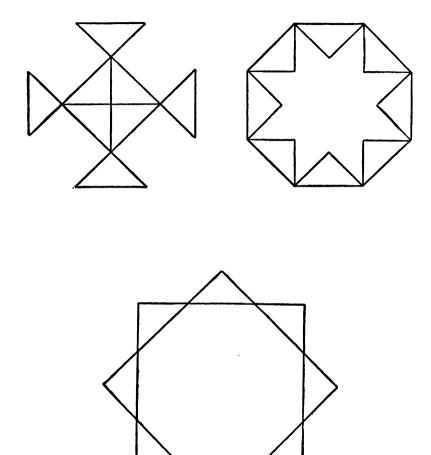
ing up a very full brush of the color and holding it several inches above the paper shake off a big drop like a blot in two or three places. Have him do the same with the yellow and blue respectively, and allow the colors so dropped to mingle at their edges, covering the whole paper with a stained glass window effect. The colors should not be stirred up together with the brush or they will become "muddy." Have him notice that he gets six colors with only three that he used,—orange where the red and yellow mingled, green from the yellow and blue and violet from the red and blue. Have him paste this in the scrap book. This is a very important as well as a very instructive lesson in color synthesis and no less surprising than instructive.

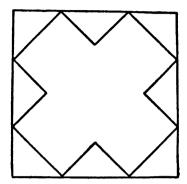
## LESSON 52.

- 1. Have the child string the beads in the order, two spheres and one cube, using one color only for all the spheres and another complementary (see lesson 44) for the cubes.
- 2. Have the child model a pear, using a bit of match stick or twig for a stem.

#### LESSON 58.

1. Give the child 8 right angle triangular tablets and have him arrange them in "forms of beauty."





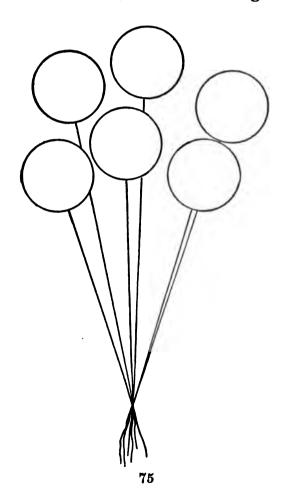
2. Have the child make a blue chain as he did a yellow in lesson 47, then join the 2 chains already made with this one. This makes an attractive Christmas tree ornament.

# LESSON 54.

- 1. Have the child arrange sticks and pegs in a house "sequence." To-day have him represent dwellings of men—a tent, a house, a palace. The conversation should be about the kind of men who live in the houses he is making—Indians and soldiers in a tent; kings and queens in palaces.
- 2. Have the child draw one or several of the houses made above with the sticks. Never disparage his results nor laugh at his efforts, no matter how crude they may be. Suggest improvements or alterations, but tactfully, so as not to discourage him.

# LESSON 55.

1. Give the child 6 rings or circular tablets and have him arrange them in a cluster near the top of a sheet of paper. Then have him, without disturbing the order,



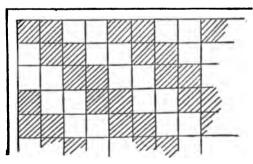
draw with a pencil around the outside of each, so that he will have when finished a drawing of 6 rings. Then have him draw lines from the bottom of each ring to a point near the bottom of the sheet of paper so as to form a collection of toy balloons when painted in the following lessons. Save.

2. Have the child sew another card.

# LESSON 56.

- 1. Take 2 lentils out of the box, counting them out aloud as you do so, and ask the child to do the same. Count out 3 lentils and have the child do the same. Continue this up to 6, then have the child make 6 piles with 1, 2, 3, 4, 5 and 6 lentils respectively in each. Tell him that another name for 6 is "½ dozen."
  - 2. Have the child weave one-half a mat as follows:

First strip over 2, under 2, and so on. Second strip under 1, over 2, under 2, over 2.



Third strip under 2, over 2, and so on.

Fourth strip over 1, under 2, over 2, and so on to form a stepped arrangement.

## LESSON 57.

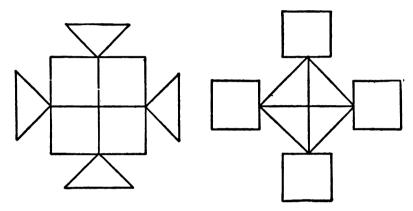
- 1. Have the child make with the pegs on the peg board concentric squares, each square a different color.
  - 2. Have the child paint the alternate rings drawn in lesson 55, red, yellow and blue, respectively, being very careful not to go beyond the lines. If he is unable to do this carefully enough with the water colors, have him use the colored crayon. Save. Review the fact that these are the three most important colors and are called First (Primary) colors. The intervening rings are to be left blank for the next painting lesson.

#### LESSON 58.

- 1. Have the child string the beads in a color and form arrangement of his own invention.
- 2. Have the child begin to model a cylindrical "sequence." Have him model a rolling pin, making a large cylinder first for the roller, then two small short cylinders for the handles at either end.

# LESSON 59.

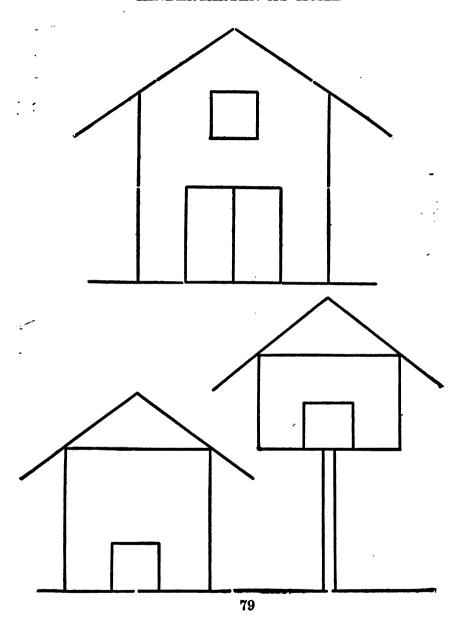
1. Have the child arrange 4 squares and 4 triangular tablets in forms of beauty, starting first from a centre of squares, then from a centre of triangles.



2. Have child arrange the parquetry papers in the best design made above in the tablets and paste in his scrap book.

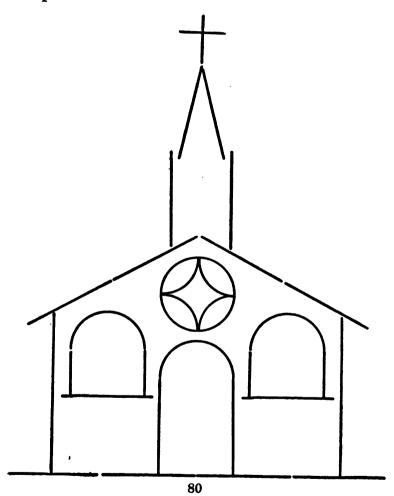
## LESSON 60.

- 1. Continuing the house "sequence" begun in lesson 54, to-day have the child arrange the sticks and pegs to represent the dwellings of animals—a dog-kennel, a barn, a bird house. Never omit the conversation which in this case especially may be made most interesting.
- 2. Have the child draw one or more of the houses made above with the sticks.



# LESSON 61.

1. Have the child arrange the sticks, pegs and quarter rings to represent the house of God—a church—with a steeple and cross.



2. Have the child draw the church made above with the sticks.

## LESSON 62.

- 1. Take 7 lentils out of the box, counting them out aloud as you do so and have the child do the same. Continue this up to 12 and have child make piles of each number of lentils as in lesson 56.
  - 2. Have the child finish mat begun in lesson 56.

## LESSON 68.

- 1. Have the child put pegs or sticks in the holes of the cubical and cylindrical beads and lay out a park or garden using them as trees, shrubs, etc.
- 2. Using the sheet of balloons begun in lesson 55 and partly completed in lesson 57, have the pupil mix red and yellow in the pan of his paint box and with the resulting color (orange) paint the blank ring left between the red and yellow circles. Have him do the same with the yellow and blue, and blue and red, which form the colors green and violet, respectively. Tell him that these resulting colors as they are made from the "First" colors are called "Second" (Secondary) colors. This is a most important lesson and may be made the basis of a very interesting or imaginative discussion.

#### LESSON 64.

- 1. Have the child string the beads in another color and form arrangement of his own invention.
- 2. Continuing the cylinder "sequence" have the child model a mallet, making first a short, fat cylinder for the head, then a long thin cylinder for the handle.

## LESSON 65.

- 1. Have the child arrange 4 squares, 4 triangles and 4 circles (tablets) in "forms of beauty," taking squares, circles and triangles, respectively, as a centre for successive figures.
- 2. Have the child select a sewing card that is unsewn, lay it on a sheet of the black cutting paper, white side up, then, holding it firmly with his left hand, make dots through the holes with a pencil. Then removing the card have him connect the dots with a line and cut out to form a silhouette of the object.

#### LESSON 66.

1. Have the child arrange the sticks to form a "sequence" of articles of bedroom furniture. Ask him what might be found in a bedroom. He might suggest and make a chair, a bed, a table, a couch, a bureau.

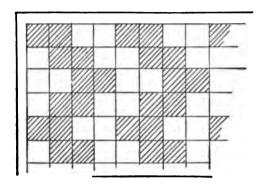
2. Tie a piece of shoestring about 4 inches long tightly around the foot of a piece of crayon. Have child fasten the other end with a pin stuck vertically through a sheet of paper into the table, then draw a circle by moving the crayon around the pin as a centre. The string should be kept taut and the pencil vertical. Have the child practice till he can make a perfect circle in this way; then make concentric circles of different colors by shortening the string but using the same pinhole for each circle. Call it a target and explain what a target is if he does not know. Save.

## LESSON 67.

- 1. Have the child arrange the half rings to form a wall paper border; a flower bed border or other borders.
- 2. Have the child sew another card or finish one already begun.

## LESSON 68.

- 1. Write the figures from 1 to 6 on a sheet of paper, making them two or three inches high, then have child copy them with the lentils.
- 2. Have the child weave one-half of another mat to form a zig-zag design as follows:



#### LESSON 69.

- 1. Have the child make a "form of beauty" with the pegs and the peg board, arranging them in rows somewhat as a checkerboard mat was woven—thus, a peg in the first hole, then skip a hole and so on for the first row, then a peg in the second hole, then skip a hole and so on for the second row. The third row should be the same as first, and the fourth same as second. Two colors of pegs may be used, one for each row alternately.
- 2. Give the child a sheet of white paper about 5 inches square and have him fold the lower edge to exactly meet the top edge. Ask him what this resembles —a book. Ask him how many leaves it has and how many pages. Holding it in your hand, "read" a story to him out of it or describe the imaginary pictures you see there. Have him do the same. Then have him

fold it again in the opposite direction to form the "singing book." Have him sing a song from the book. Open it out and he can see a "window" of 4 panes. Have him describe what he sees through the window. This may be made not only a most fascinating game but a very valuable exercise for cultivating the imagination.

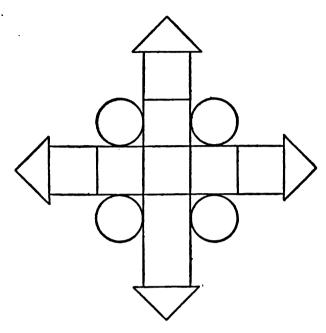
#### LESSON 70.

- 1. Have the child put a cubical bead on each end of a 3 inch stick and lay flat; then do the same with 3 other sticks and lay in form of a square, laying 2 of the opposite sides of the square so that the beads are on top of the beads on the other two sticks. Have him put beads on other sticks in the same way and build them up on those already laid to form a log house or pen.
- 2. Have child model a hat, then cut a narrow strip of colored paper and make a band and streamers. Ask him what shape the crown is.

#### LESSON 71.

1. Have the child arrange a limited number of the tablets of different forms and light and dark to make cross-like forms or "sequences" in as many varieties as he can.

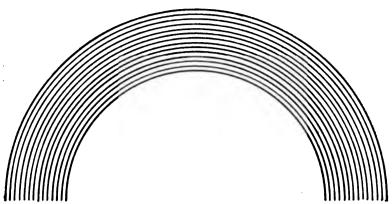
ŧ:



2. Have the child arrange the parquetry papers in the best design made above and paste in his scrap book.

# LESSON 72.

- 1. Have the child arrange the sticks to form a "sequence" of articles of furniture found in a kitchen—a stool, a broom, a clothes horse, a stove.
- 2. Have the child draw half circles as directed for circles in lesson 66, making several circles close together of each color and in the order of the spectrum, thus forming a rainbow.



LESSON 78.

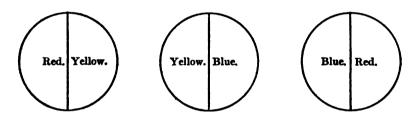
- 1. Have the child arrange sticks and half rings to form a bridge with arches, a colonnade, a row of windows, etc.
- 2. Have the child fold "The Book" (lesson 69-2) then open and fold the two edges to coincide with the centre line. What does this resemble when stood upright? A pair of doors or window with shutters. Partly open to form "The Table." Crease the centre line in the opposite direction and stand on end to form "The Screen" and have pupil tell what imaginary things are behind it.

# LESSON 74.

- 1. Write the figures from 7 to 12 on a sheet of paper, making them two or three inches high, then have the child copy them with the lentils.
  - 2. Have the child complete the mat begun in lesson 68.

## LESSON 75.

- 1. Have the child arrange the pegs on peg board to make "forms of beauty" as described in lesson 69 but of an original design.
- 2. Have the child make 8 circles on a sheet of paper, drawing them around a silver dollar or a large ring. Then have him divide each in half by drawing a line through the centre—a diameter—and paint the first, half red and half yellow; the second, half yellow and half blue; the third, half blue and half red. Save these for cutting out to be used on a top to show "secondary" colors obtained when each pair of "primaries" is blended in spinning.



# LESSON 76.

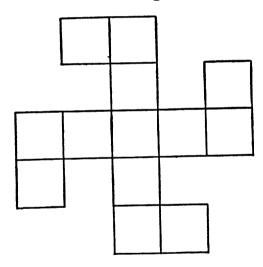
1. Give the child 2 shoe-strings and have him make a necklace as follows, first choosing his color scheme of 2 colors only. Thread both strings through a cylinder, then each string separately through a sphere so

that they will lie alongside of each other instead of in line, then both strings through a cylinder and so on.

2. Have child model a cup and saucer.

#### LESSON 77.

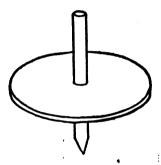
1. Have the child arrange a limited number of the tablets in different forms and light and dark to make whirligig forms or "sequences," of which the "swastika" is the simplest. Ask him why these forms suggest motion about a centre—turning.



The "swastika" cross or Thor's Hammer is a symbol of good luck found in various forms in all parts of the world among all people and from earliest times.

2. Have the child cut out the colored circles made in

lesson 75. Make a top that may be spun by a twist of the fingers, either by putting a wooden plug through a silk spool or a stick through the centre of a circle of heavy cardboard, a large button or a circle of tin cut out of the top of yeast powder box with a can opener.

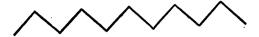


The stick should fit tightly and be exactly at right angles to the plane of the disc. Then puncture a hole through the centre of each of the colored circles so that they may be placed on the top and have him spin each in turn and notice the colors resulting from the blend of the pairs of primary colors.

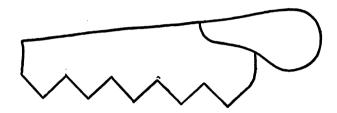
## LESSON 78.

- 1. Have the child arrange the sticks to form a "sequence" of tools that are used in the house, in the garden, in a shop, etc., thus, a hammer, a rake, a pitchfork, a brace and bit.
  - 2. Draw a line either curved or straight that forms

a part of some tool and ask the child to finish it, thus:



He will guess that it is meant for the teeth of a saw and would probably complete it thus:

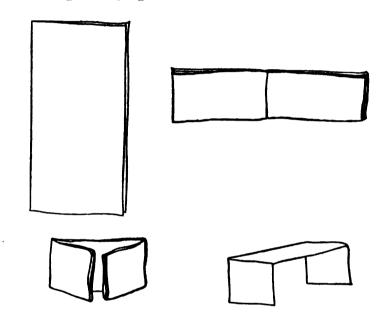


Draw other lines in the same way and have pupil finish. It is not necessary that the child should make the tool the parent has in mind, but it is a good test of his ingenuity and seldom fails to bring out the most enthusiastic response, so that, "Please draw me a line, mother," may be found an oft repeated request outside of regular school hours.

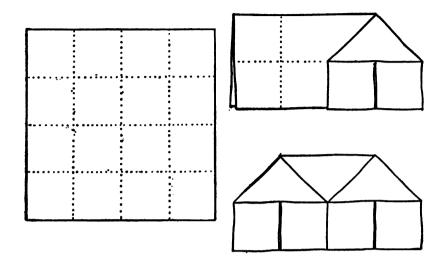
# LESSON 79.

1. Have the child arrange the sticks and rings to form articles found about the house,—a tea cup, a lamp, a coffee-pot, an umbrella, etc.

2. Have the child fold "The Book" (See lesson 69-2), then without opening, fold lengthwise again, then end to end to form the 8 leaved singing book. Open the singing book and fold each end to the centre line and partially open to form the "Foot Stool."



Open out to the original square which will now be creased into a checkerboard of 16 squares. Fold this in half; then fold over the upper right hand corner and partially opening this end, press down to make "The Barn," as shown below. By treating the opposite corner in the same way, we get "The House."



## LESSON 80.

1. Have the child make on his table a large circle of lentils, then using the sticks, make it into the face of a clock. He will probably not be old enough to be taught how to tell time but if he can count up to 12, he may learn the hour by the short hand, ignoring the long hand for the present. Of course he should have a clock or watch or one drawn for him to copy from.

Ask him to show which way the hands of a clock move, by rotating his finger in the air. Tell him this motion is called clockwise and the opposite direction is called contra-clockwise. Ask him if clockwise is the same as motion in a circle from left to right, as it is often mistakenly described, and when clockwise motion

is from right to left. Tell him that almost everything is screwed or wound up clockwise and unscrewed or unwound contra-clockwise. This is an important idea of direction which many people never learn, although it is knowledge for which there is almost daily demand.

2. Have the child weave half a mat starting with the centre strip and weaving alternately one above and one below the middle strip, so that the design in the upper half will be a reversal of that in the lower.

# LESSON 81.

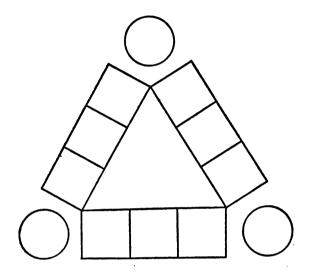
- 1. Have the child arrange the pegs to make "forms of beauty" in color, thus: Have him put a red peg in the first hole, then a yellow in the second, then a red in the third and so on alternately.
- 2. Have the child paint a finished sewing card in an appropriate color.

## LESSON 82.

- 1. Have the child string the beads, using two strings, as directed in lesson 76, but inventing his own color and form arrangement.
- 2. Have the child model a horseshoe, making first a very long cylinder, thicker in the middle than at the ends, then bending it into shape, flattening it and making nails with the lentils.

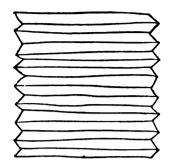
# LESSON 83.

1. Have the child arrange a limited number of tablets in triangular form, thus:



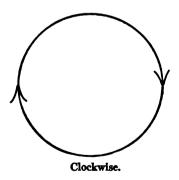
2. Have the child fold "A Fan" as follows: Take a sheet of paper about letter size, 8x10, and fold the short edge over about half an inch. Invert and fold this strip back. Invert and do the same, and continue in this way till the entire width of the paper is folded into these narrow strips. Pinched together at one end, spread at the other this forms "The Fan." Opened out it forms "The Washboard."

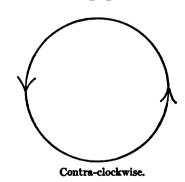




# LESSON 84.

- 1. Have the child arrange the sticks to make straight lined objects found about a house—a window, a panelled door, a ladder, steps, shelves, a trunk, etc.
- 2. Have the child draw clockwise circles or scrolls with his index finger held in the air, then with crayons on paper. (See lesson 80-1.) Have him indicate the direction by drawing one or more arrow heads on the circles. Have him in the same way make contraclockwise circles, first in the air, then on paper.





96

#### LESSON 85.

- 1. Have the child arrange the sticks and rings to form different toys—a drum, a sled, a top, a kite with tail, etc.
- 2. Have the child take a letter size sheet of paper and fold a short edge so that it coincides with the adjacent long edge. Have him then, without opening it, fold the folded edge to the same long edge twice in succession to form "The Dart," with which he may have some harmless sport in casting it at the target made in lesson 66.



## LESSON 86.

1. As a preparation for this lesson, take the child out of doors on a winter evening just before he goes to bed and let him look at the stars. Tell him that they are suns so very, very far away that they seem small. Tell him that long, long ago men thought the stars made pictures, and point out the Big Dipper in the northern heavens which some thought looked like a bear, others like a wagon and still others like a dipper. Point out

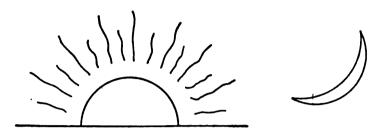
other constellations and tell what they were supposed to picture, then at his lesson have him make the Big Dipper with lentils and any other constellations he may remember.

2. Have the child complete the mat begun in lesson 80.

#### LESSON 87.

- 1. Have the child arrange the pegs as in lesson 81, but inventing his own color scheme.
- 2. Have the child begin a light "sequence." Ask him what things in nature give light—the sun, moon and stars; what things invented by man—candle, lamp, gas, electric light. Have him then draw a horizontal line through the centre of a sheet of paper to represent the horizon—why is it called a horizontal line?—and in the centre draw, with the help of a ring or coin, a half circle resting on the line—then color it orange or red to represent the setting sun. Rays of the same color drawn from the sun help the effect. Then have him,

on another sheet, draw a crescent moon and color it yellow.



# LESSON 88.

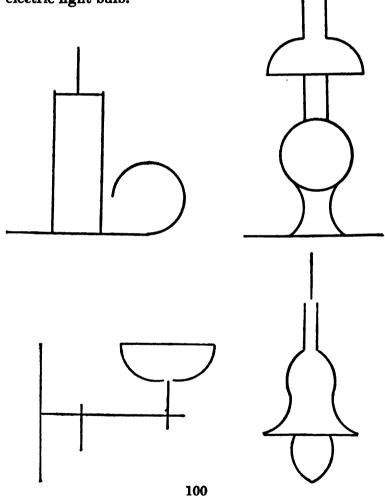
- 1. Have the child string the beads, using two strings and inventing his own color and form arrangement.
- 2. Have the child model a candlestick. Review the previous conversation on light and continue it in this lesson.

## LESSON 89.

- 1. Have the child arrange the square and circular tablets in a border of his own design around the edge of his table.
- 2. Have the child make paper towels by cutting a sheet of paper into oblongs about 3"x5", then slitting the end of each up about ½ inch to form a fringe. Have him try to make all the slits as accurately the same width and length as possible. Save.

# LESSON 90.

1. Have the child arrange the sticks and rings in a light "sequence" to form a candle, a lamp, a gas jet, an electric light bulb.



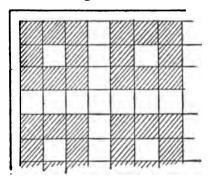
2. Have the child draw the light "sequence"—a candle, a lamp, a gas jet and an electric light bulb.

# LESSON 91.

- 1. Have the child arrange a limited number of rings and parts of rings in "forms of beauty."
- 2. Have the child sew or complete another sewing card.

#### LESSON 92.

- 1. Have the child copy with the lentils the design of the next sewing card.
- 2. Have the child weave one-half a mat to form a design made of units of squares, as follows:



# LESSON 98.

1. Have the child arrange the pegs of one color to make "forms of beauty" of his own invention starting

from the centre and working outward. Whenever he places a peg on one side, he should place one to correspond on the other side (Law of Opposites). Save.

2. Have the child paint parallel red lines at each end of towel above fringe (made lesson 89), yellow lines for the second and blue for the third.

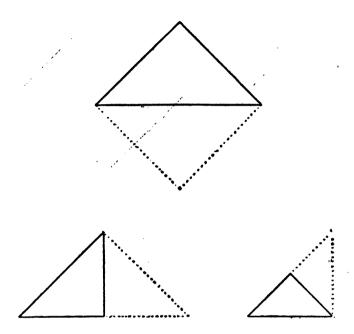
#### LESSON 94.

- 1. Have the child string the beads on one string, starting with a bead at the centre and adding beads to each side alternately so as to form a design symmetrical or balanced with regard to the centre, not a repeating or rhythmic design as heretofore. Thus, he might use a red cylinder for the centre and flank it by five or six green spheres on each side, then a yellow cube and again the same number of spheres.
- 2. Have the child model a shoe using lentils for the buttons.

## LESSON 95.

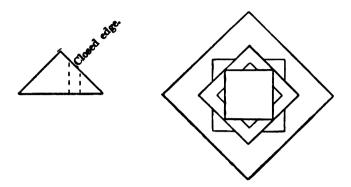
- 1. Have the child arrange the circular and triangular tablets in a border of his own design around the edge of his table.
- 2. Have the child fold sheet of colored cutting paper, not less than six inches square, corner to diagonally op-

posite corner, then a second and a third time acute corner to acute corner till he has eight triangles lying one on top of the other.



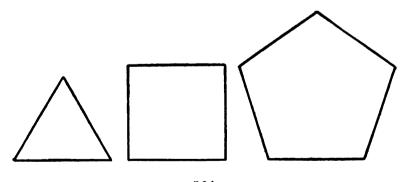
All folding should be most carefully done, the edges exactly meeting and the fold creased down firmly and evenly. The eight open edges should be held to the left. This is the usual folded form from which four sided figures are cut. Have the child then make two vertical cuts as indicated by the dotted lines in the illustration. Then open the three pieces thus resulting and,

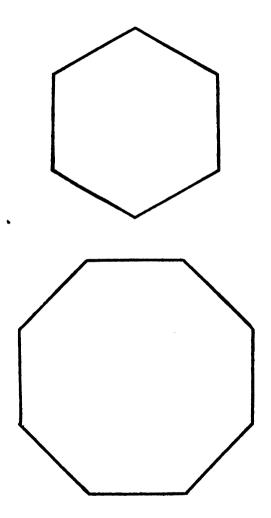
after arranging them in a "form of beauty," paste them.



# LESSON 96.

1. Have the child arrange the sticks in a "sequence" of "gons," and have him learn the names—triangle, square, pentagon, hexagon, octagon.

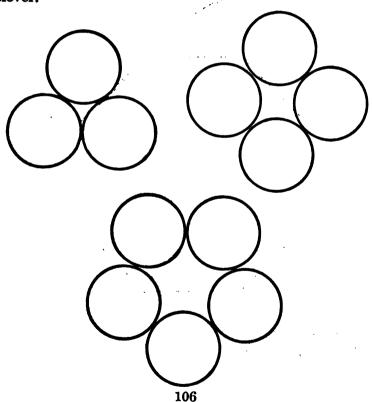




2. Have the child draw different toilet articles—a comb, brush, hand mirror, etc.

# LESSON 97.

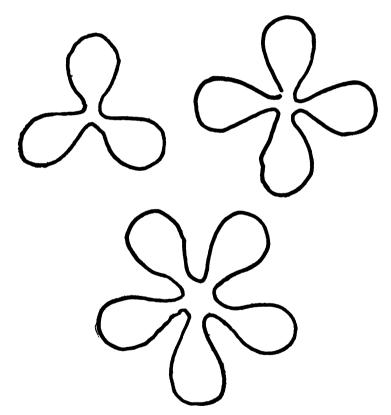
1. Have the child arrange the rings in a "sequence" of "foils" and have him notice that the foils are made with curved lines exactly as the "gons" are made with straight. Have him learn the names and their symbolism: trefoil—emblem of the Holy Trinity, Three in One—therefore used in church decoration; quatrefoil—emblem of four Evangelists, also good luck—four leaf clover.



2. Have the child sew or complete another sewing card.

# LESSON 98.

1. Have the child arrange the lentils or string of wet worsted in a "sequence" of "rosettes," and have him notice that the rosettes resemble foils.



2. Have the child finish mat begun in lesson 92.

#### LESSON 99.

- 1. Have the child place different shaped beads of one color over the pegs arranged in lesson 98 to form a design of his own invention.
  - 2. Have the child paint another sewing card.

#### LESSON 100.

- 1. Have the child string the beads as described in lesson 94, using a different balanced arrangement.
  - 2. Have the child model a teapot.

#### LESSON 101.

1. Have the child arrange the square, circular and triangular tablets in a border design of his own invention around the edge of his table.



2. Have the child fold a sheet of the colored cutting paper as described in lesson 95, cut as indicated by the dotted

line, then open, arrange the parts in a form of beauty and paste.

#### LESSON 102.

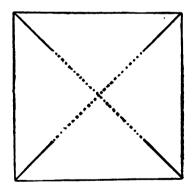
1. Draw the following straight lined letters of the alphabet, print forms, A, E, F, H, I, K, L, on a sheet of paper, making them two or three inches high, then

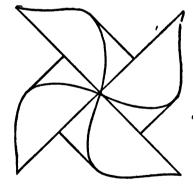
have child copy them with the sticks. Have him incidentally learn as many of the names as he will readily acquire.\*

2. Have the child draw the above letters in different colored crayons.

## LESSON 108.

- 1. Have the child arrange sticks and whole and half rings in a border design.
- 2. Have the child make a pin wheel by folding a red square corner to diagonally opposite corner, open, fold the other corner to opposite, open and slit down the creases to within an inch of the centre, fold alternate corners to centre and fasten to stick with pin.





<sup>\*</sup> According to the approved method of teaching reading and writing the letters are not learned first. There is however no conflict in having the child learn to recognize the letters in this incidental way in the kindergarten.

## LESSON 104.

- 1. Have the child copy with the lentils the design of the next sewing card.
- 2. Have the child weave a mat of a design of his own invention.

## LESSON 105.

- 1. Have the child arrange pegs of one color to make "forms of beauty" as he did in lesson 93. Then have him substitute different color pegs for those of the one color used so that the design will be one of color as well as arrangement. Save.
- 2. Have the child make a pin wheel, as described in lesson 103, using a sheet of red and a sheet of blue paper placed back to back so that both colors show when finished.

# LESSON 106.

- 1. Have the child string the beads as described in lesson 94 but using 2 strings instead of one.
- 2. Have the child model a square, a pyramid and a cone. Have him learn their names, notice in what respects they are similar and mention "forms of life" in these shapes.

## LESSON 107.

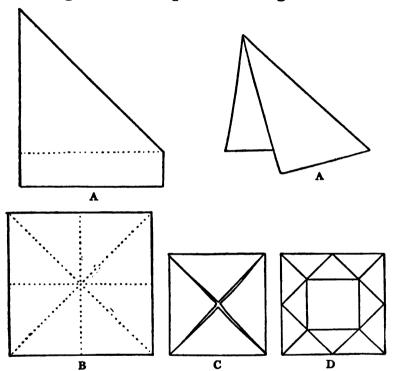
- 1. Have the child arrange the tablets to form a single unit, then repeat this unit to form a mosaic design.
- 2. The occupations in paper folding which follow, it is almost as difficult to describe clearly as it would be to give directions for making cats' cradles and yet most of the forms are so familiar that from the steps given there should be little difficulty in making the various shapes.

Give the child a sheet of oblong paper about letter size, that is, about 8"x10", and have him make "The Tent," "The Envelope" and "Frame," from dictation, as follows:

- (A) Fold a short edge till it coincides with the adjacent long edge and crease (iron) down firmly. Have him then fold back the oblong piece remaining and either tear or cut it off. Tell him this is the way he can always make a square from an oblong or test a piece of paper or any other material to see if it is square. The square folded thus, corner to corner, he may then call a tent. This is the first step.
- (B) Open the square out flat and fold in the opposite direction, corner to corner; open out and fold one edge to opposite edge, open again and fold in opposite direction. When he now opens out the square it will

be creased in four intersecting lines—8 lines radiating from the centre. This is the second step.

- (C) Fold each corner to the centre. This is the third step—"The Envelope."
- (D) Fold back each of the centre triangular points to the edge of the envelope, thus forming "The Frame."



A square of red coated paper (red on one side, white on the other) may be used for the above, in which case the folding should be done with the red side down so that "The Envelope" when finished will be red.

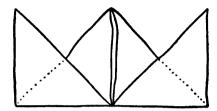
## LESSON 108.

- 1. Draw the following straight lined letters of the alphabet, print forms, M, N, T, V, W, X, Y, Z, on a sheet of paper, making them two or three inches high, then have child copy them with the sticks. Have him incidentally learn as many of the names as he will readily acquire.
- 2. Have the child draw the above letters in different colored crayons.

## LESSON 109.

- 1. Have the child arrange the rings, halves and quarters in a design about a centre.
- 2. Have the child fold a square of paper to make "The Case" and "The Crown" as follows:
- (A) Fold square of paper to make "The Envelope" (described in lesson 107).
- (B) Invert and fold the corners to the centre to form "The Case." He will then have four triangles on the upper side and four squares on the lower side.
- (C) Invert "The Case" and fold an outside corner to the diagonally opposite outside corner so that the four small squares are inside.
- (D) Holding the triangle thus formed in the left hand with the two points up, lift up the left hand, small,

inside square and crease it back and the right hand, inside square likewise, and he has "The Crown."

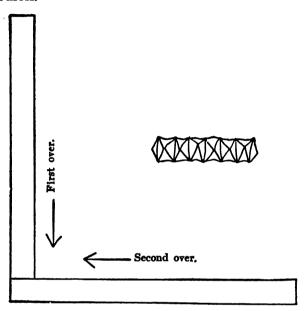


## LESSON 110.

- 1. Give the child a copy of his own first or pet name written very large—letters several inches in height—and have him lay the lentils over the lines.
- 2. Have the child fold a sheet of paper as for "The Fan," described in lesson 83. Have him iron down the creases with a paper cutter, then tear off each strip very carefully or separate into strips with the paper cutter. In either case it is important for success that the folds should be firmly ironed down to present a sharp edge. As a preparation for this lesson, the child might separate the uncut edges of a magazine or book with a paper cutter.

Have him take two of the strips thus made, and placing the end of one on the end of the other and at right angles to it, fold the lower across the upper, each one alternately, till each strip is entirely folded up. Paste the last fold to the one beneath, invert and do the same

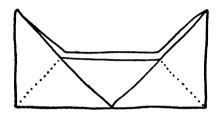
with the first square and when pulled out he has "The Accordion."



## LESSON 111.

- 1. Have the child place different shaped beads over the form of beauty made in lesson 105, using the same color beads as the pegs over which they are placed.
- 2. Have the child fold a paper to make "The Bed," "The Cradle" and "The Trough," as follows:
  - (A) Make "The Crown" (described in lesson 109).
- (B) Fold back the points that stand up in the centre to form "The Bed."

- (C) By folding one end point down into the inside this may be converted into "The Cradle."
- (D) By doing the same with the other point "The Trough" is made.



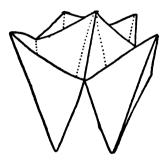
## LESSON 112.

- 1. Have the child string the beads in a balanced arrangement, using two strings.
- 2. Have the child model a boat using sticks for masts and bowsprit.

# LESSON 118.

- 1. Have the child arrange the tablets to form another mosaic design of his own invention.
- 2. Have the child fold paper to make "The Salt Cellar" or "Nose Pincher," as follows:
  - (A) Make "The Case."
  - (B) Invert, so that the 4 squares are up, then:
- (C) Holding the case with the left hand under it, insert 4 fingers of the right hand beneath the small

squares, thrusting them down into the corners, at the same time that the centre of the case is pushed up from beneath and pinched together by the fingers of the right hand.



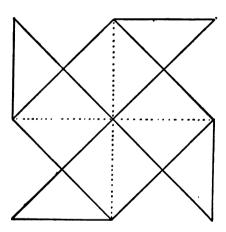
## LESSON 114.

- 1. Draw the following letters of the alphabet, B, C, D, G, J, as was done in lesson 108, and have the child copy them with the sticks and portions of rings. Have him incidentally learn as many of the names as he will readily acquire.
- 2. Have the child draw the above letters in different colored crayons.

## LESSON 115.

- 1. Have the child arrange the rings, halves and quarters in flower designs.
- 2. Have the child fold paper to make "The Table" and "The Windmill," as follows:
  - (A) Make "The Envelope" (see lesson 107).

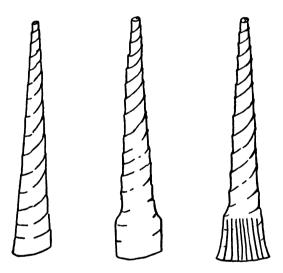
- (B) Then, instead of inverting to make "The Case," fold each corner to the centre, "The Tray."
- (C) Holding "The Tray" in the left hand and keeping the points of the triangles as nearly as possible in place, pull out from underneath each of the square points and crease them backwards so that 4 large triangular wings stand up. Inverted, this forms "The Table." This is rather difficult but important, for several interesting forms are made from it.
- (D) Fold these back, as shown below, to make "The Wind Mill."



LESSON 116.

1. Give the child the copy of his own first name written for him in lesson 110, then have him copy it on the table with the lentils.

2. Have the child make strips as directed in lesson 110. Then have him roll each strip up tightly on a stick. Have him pull out the inside of two of the rolls to form "curls" which he may tuck behind his ears. Have him paste the loose end of each of the remaining rolls, then punch out their centres to form "The Lamplighter," or horn. By pinching the larger end, "The Spoon" and "Shovel" are made. By slitting up the large end thus flattened, "The Fork," "Paint Brush" and "Broom" are made.



LESSON 117.

1. Have the child arrange different colored pegs and beads in a design of his own invention.

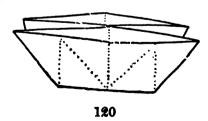
2. Have the child draw around his left hand placed on a sheet of paper, the fingers extended, then paint in the outline to form a glove.

## LESSON 118.

- 1. Have the child string the beads in another balanced arrangement, using 2 strings.
- 2. Have the child model a chain, rolling out very long cylindrical pieces and joining their ends, first inserting each in the link already made.

## LESSON 119.

- 1. Have the child make another mosaic design of his own invention.
- 2. Have the child fold paper to make "The Double Boat," as follows:
  - (A) Make "The Wind Mill" (see lesson 115).
- (B) Fold 2 wings so that they lie alongside of each other in one direction and the other 2 in the opposite direction.
- (C) Invert and fold in half, lengthwise to form "The Double Boat."



Various other forms may be made by folding the wings of "The Wind Mill" in different directions.

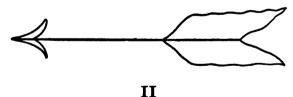
# LESSON 120.

- 1. Draw the remaining letters of the alphabet, O, P, Q, R, S, U, as was done in the preceding lesson and have the child copy them with the sticks and portions of rings. Have him incidentally learn as many of the names as he will readily acquire.
- 2. Have him draw the above letters in different colored crayons.

# THANKSGIVING LESSONS.

Ι

- 1. Have the child arrange the sticks, lentils, etc., to form a bow and arrow, and a tomahawk. Ask him who use bows and arrows and tell him what connection the Indians had with Thanksgiving. When the Pilgrims first came to this country they found many Indians, some friendly, others hostile. After they had been here about a year, they gave thanks that their lives had been spared and that their first crops had been successful. The friendly Indians had taught them how to grow Indian corn or maize. (In Europe they call wheat and other grain "corn.") This was the first Thanksgiving Day.
- 2. Have the child draw arrows with barb and feathers.



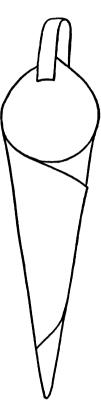
1. Have the child arrange the lentils to form a wigwam, a canoe and a "pipe of peace" and explain that

the Indians smoked a pipe with the white men to make a treaty of peace.

2. Have the child model "mud pies" -bread, cake, plum-pudding, etc., for a make believe Thanksgiving Dinner.

## TTT

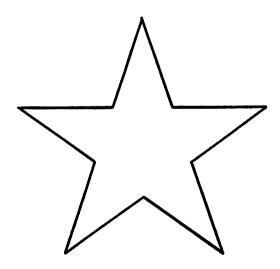
- 1. Have the child pop corn and string it on a thread.
- 2. Have the child make cornucopias of different colored paper by folding and pasting an edge of a square sheet of paper to the adjoining edge and cutting and pasting a paper loop to the upper corner. Have him fill it with pop-corn and give it to a friend. Explain that a cornucopia means "horn of plenty" and ask the child why it and the corn are appropriate to Thanksgiving.



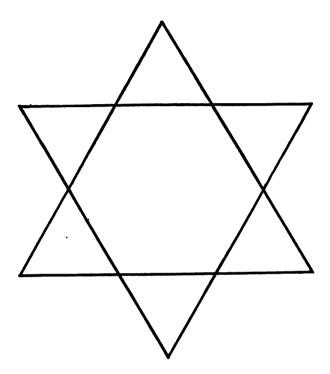
# CHRISTMAS LESSONS.

Ι

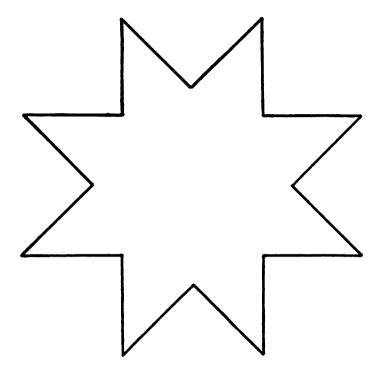
1. Have the child arrange the sticks to form a 5 pointed star and then a 6 pointed star or Solomon's seal (the Jewish emblem), then an 8 pointed star. Call his attention to the fact that the Solomon's seal is made of two triangles. Ask him which he likes best. Do the stars in heaven have points? No, but they



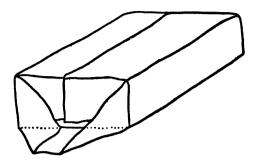
give out rays of light which are something like points. Tell him the story of the Star of Bethlehem.



2. Have the child finish a mat or a sewing card for a Christmas present. Have him learn to do up a Christmas book or bundle. The wrapping paper should be cut to such a length that it will only lap about an inch when wrapped around the book and its width should be the length of the book plus twice its thickness.



- (A) Wrap the width of the book in the *length* of the paper and hold down the lap with left hand.
- (B) Press down the paper extending over each end and crease it into the corners.
- (C) Crease the paper extending over the sides and fold back to the end.
- (D) Crease down the paper extending under the bottom and fold up.
- (E) Fasten end flaps and centre lap with parquetry paper pasted on them or tie with string.



II.

- 1. Have the child arrange the sticks to form a stable, a manger. Tell him the part of the Christmas story connected with what he is making.
  - 2. Have the child draw a Christmas tree with candles on it. Have him make Christmas bells by cutting a folded sheet of paper as shown below, then paste and connect with a ribbon made with crayon.



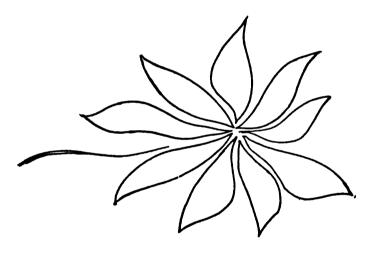
III.

1. Have the child arrange the dark and light tablets to form a chimney.

2. Have the child draw stockings and paint them different colors.

# IV.

- 1. Have the child arrange the dark and light tablets to form a fireplace and use the red pegs to make a wood fire.
- 2. Have the child cut lancet shape strips of red paper, arrange them about a centre and paste to make poinsettia leaves.



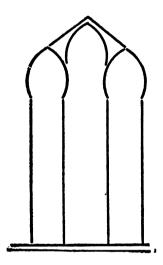
V.

1. Have the child arrange the sticks and quarter rings to make holly leaves and put in the berries with lentils.

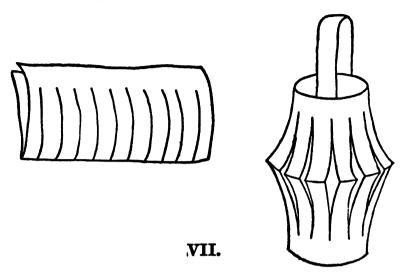
2. Have the child draw, or draw for him, a holly spray and have him color the leaves and berries.

# VI.

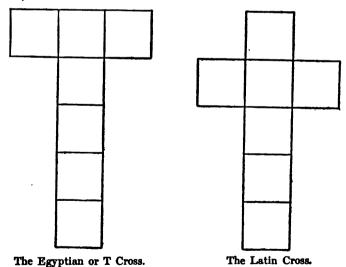
1. Have the child arrange sticks and part rings to form church windows.



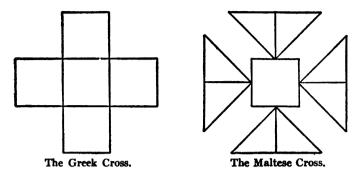
2. Have the child fold a square of colored paper edge to edge, then cut slits ½ inch apart from the folded edge to within half an inch of unfolded edge; then open and paste edges together, so that strips run lengthwise, to form a lantern. Cut another strip and paste to top edge for a handle. These make very decorative Christmas tree ornaments.



1. Have the child arrange the tablets to form different kinds of crosses and have him learn their names—the Egyptian or T Cross, the Latin Cross, the Greek Cross, the Maltese Cross.



130



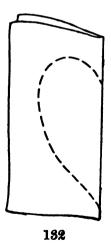
2. Have the child make chains of different colored paper as described in lesson 41 for Christmas tree decoration.

# ST. VALENTINE'S DAY.

I.

- 1. Have the child arrange the sticks and pegs to represent a letter—obverse side with postage stamp; reverse side showing diagonals.
- 2. Have the child fold a piece of the red cutting paper in half, white side out. Draw a line for him as shown below and have him cut out, open and paste. Ask him why hearts are associated with St. Valentine's Day.

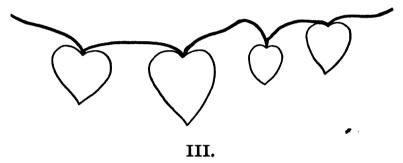
Have him practice cutting others free-hand.



Have him make an envelope for his heart valentine as described in lesson 107, joining the flaps by pasting a small red heart at their meeting point.

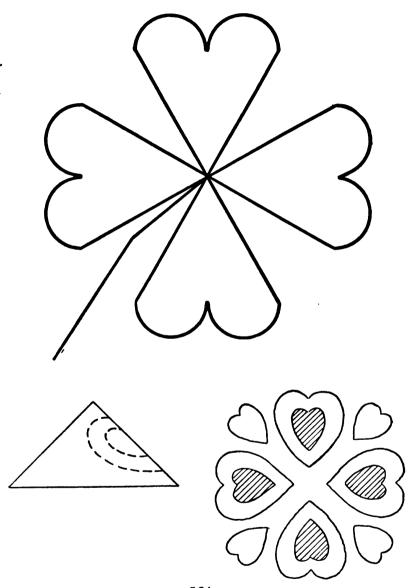
## II.

- 1. Have the child arrange the sticks to represent a street lamp-post with letter box.
- 2. Have the child cut several hearts, large and small, paste on a sheet of paper and connect by a ribbon made with the red crayon.



- 1. Have the child arrange the sticks and half rings to make 4 hearts around a centre in the form of a four leaf clover design.
- 2. Have the child cut and paste a valentine as follows: Fold a square sheet of red paper as directed in lesson 95, that is, corner to corner 8 times in succession, then holding the closed edge to the right, cut lines which the parent should draw as shown below.

Then open and paste.



# WASHINGTON'S BIRTHDAY.

## I.

- 1. Tell the child something about George Washington, and then have him arrange the sticks, lentils and rings to represent a soldier's cap, a cannon, etc. Tell him the connection with Washington.
- 2. Have the child draw with crayon a hatchet, a cluster of cherries, or a cherry tree with cherries on it and tell him the story of Washington and the cherry tree.

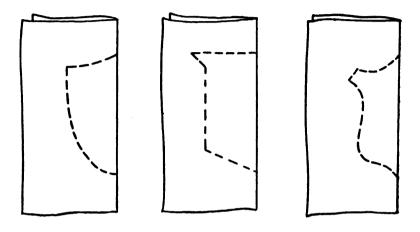
## II.

- 1. Have the child arrange the sticks and lentils to form a United States flag, using the sticks for stripes and the lentils for stars.
- 2. Have the child draw with the red crayon a row of fire crackers with fuses. Have him make powderless fire crackers as follows: Roll up on a stick strips of red paper 2 inches wide, paste the loose end and insert a piece of string in the centre for a fuse.

#### III.

- 1. Have the child arrange the tablets to form a fort.
- 2. Have the child fold several sheets of paper in half,

draw lines for him as shown below and have him cut out to form shields. Paste.



IV.

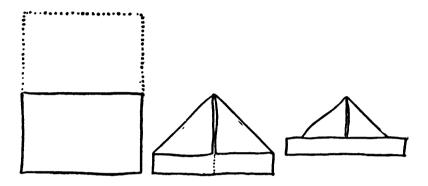
- 1. Have the child put beads on sticks to represent soldiers and set them up in line as if marshaling an army. Two blue cylinders with a spherical bead on top might represent ordinary soldiers, three cylinders with a bead on top, captains and so on. Save.
- 2. Have the child with the aid of the teacher cut and paste a United States flag using the red weaving strips for the stripes—7 red and 6 white (the blank spaces between the red)—and a square of blue through which holes have been punched for the canton, as the space in the corner is called.

## V.

- 1. Have the child place beads on sticks to make an opposing army of red coats and draw them up in line of battle against the blue coats made in preceding lesson. Have him also make cannons—several cylinders on a stick, and flags—a cylinder supporting a stick to the top of which a piece of parquetry paper has been pasted.
- 2. Have the child fold a sheet of newspaper to make a cocked hat, as follows:
- (A) Placing the newspaper before him in reading position, have him fold the upper edge down to the lower.
- (B) Fold the right edge to left and open to give a vertical crease down the centre.
- (C) Fold the upper left and right hand corners down so that the upper edges meet in a vertical line in the centre.
- (D) Fold half the thickness of the oblong strips of paper at the bottom up; invert and fold the remaining thickness of paper up.

The hat will retain its shape if worn, but to make it secure it may be pinned, care being taken however that the pin point does not protrude. A tassel or plume made of gayly colored tissue paper pinned to the top point of course makes the hat more gay. The hat may be made smaller and still more secure and

neater as follows: Stretch the sides of the hat apart so that the front and back peaks come together, lap the projecting corners of the hat rim and fold the lower corners up to the top.

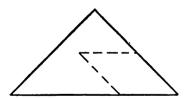


# THE CHILD'S BIRTHDAY.

1. Have the child string a necklace of beads of the color of his birth-stone or of his own birth-stone "set" with others.

January, Garnet	July, Ruby
February, Amethyst	August, Sardonyx
March, Bloodstone	September, Sapphire
April, Diamond	October, Opal
May, Emerald	November, Topaz
June, Agate	December, Turquoise

2. Have the child cut a star with help of the parent, as follows: Fold a square sheet of paper (gold paper if it can be obtained) as described in lesson 95, that is, corner to corner, 8 times in succession, then holding the closed edges to the right cut in the lines indicated below:



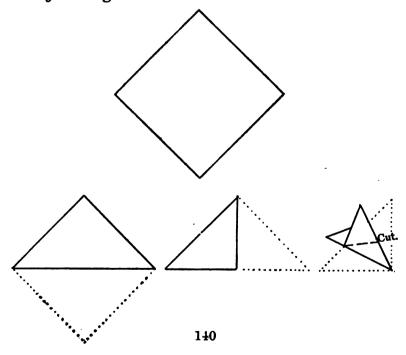
This will give an eight pointed star which the child will take delight in wearing pinned to his breast or suspended from the necklace of beads he has made.

If the child is five years old, it is much more appropriate to cut a *five* pointed star. To do this, have him, first, arrange the sticks in a star form:

Then holding each stick firmly with his left hand draw around it after which of course it may be cut out.

If the child is six years old, a six pointed star may be cut from folded paper as follows:

Fold a square of paper corner to corner, then corner to corner again. Then, instead of folding corner to corner a third time, fold each acute angle corner towards the centre so that each exactly overlaps the other before *ironing* the edges down. Then cut as indicated below:



Have the child make a crown with the parent's help. Take a strip of heavy paper or cardboard about 18 inches long and 8 inches wide and have the child arrange the sticks in a zigzag border along the edge, or the sticks and rings. Then have him draw in the design thus made, cut out and paste or sew the two ends together.



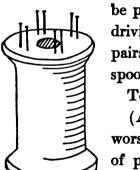


The crown is improved in appearance if covered with gold paper or if circles and squares of colored parquetry are pasted along the edge or in the points to represent jewels.

## UNDIRECTED WORK

The following suggestions for "busy work" and play will be found valuable whenever the child is restless or at a loss how to occupy himself. For this work the table and chair may be used as in directed work, though often the floor is a better place. The materials are such as may usually be found in almost any household.

- 1. Give child a needle threaded with stout thread and some cranberries, acorns or grains of corn (soaked over night) and have him thread them into a necklace or chain.
- 2. Have him make a necklace as above, alternating the berries and the corn.
  - 3. Have him knit reins on a spool knitter which may



be purchased very cheaply or made by driving 8 heavy pins or wire nails in pairs into the top of an empty thread spool.

To knit the reins proceed as follows:

(A) Wind the loose end of a ball of worsted once around each of the pairs of pins in succession to the right and pass loose end through spool.

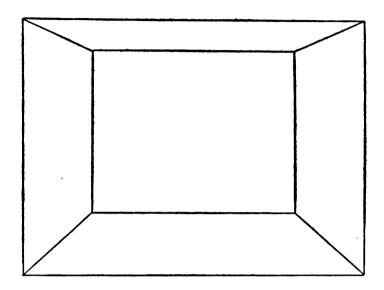
- (B) Grasping the ball end of the worsted between thumb and first finger of left hand together with the worsted, pass it to the left above the loops on each pair of pins.
- (C) With a needle held in the right hand, lift up the under loop, drop it over the top of the pair of pins and pull with right hand on thread running through spool to tighten up the work.

Continue (B) and (C) till "reins" are completed.

Different colored worsteds may be used, dividing the reins into different colored pieces.

- 4. Give the child a small mirror or piece of one—but without jagged edges—or even a glass of water, and have him hold it in the sunlight and cast reflections on a shaded surface—the wall, ceiling and different objects in the room. Froebel's title, "The Light Bird" suggests the fanciful turn this play may take.
- 5. Give the child a glass prism and have him use it similarly to throw rainbows around the room.
  - 6. Have the child blow soap bubbles.
- 7. Have him cut out of old magazines or illustrated catalogues all the pictures of houses and grounds he can find, then trim close very carefully and paste in scrap book.
- 8. Have him cut out pictures of parlors or parlor furnishings and mount on a separate page of scrap book. If the page is ruled for him as shown below, the

effect of a room is given and the furnishings may be placed as they would naturally be arranged, adding much to the appearance and interest.



- 9. Have him cut out pictures of dining room furnishings and paste as described above.
  - 10. Have him cut out pictures of kitchen furnishings.
  - 11. " " " bedroom "
  - 12. " " hall "
  - 13. " " " bathroom "
  - 14. " " grocery store
  - 15. " " " " barn or stable '
  - 16. " " '' " clothing store '
    17. " " other store '

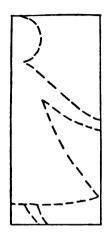
- 18. Have him cut out pictures of toys
- 19. " " " " flowers
- 20. Have him cut out and paste Animals in the same way, and cut and paste strips of paper across the front of room to make a cage with bars.
- 21. Have him make a quantity of paper money by putting a penny, five cent piece, dime, etc., under a sheet of drawing paper and, holding it steady, rub crayon or flat unsharpened end of pencil over it till design shows, then cut out carefully and preserve for playing store.
- 22. Have him cut out of the advertisements in magazines, pictures of shoes, of which many kinds may usually be found, then duplicate by drawing around the edge of each shoe on blank paper and cutting out. Have him then play shoe-store, arranging the shoes in pairs and all the shoes of a kind in rows and selling for the paper money.
- 23. Have him make balls of crumpled up newspaper and standing at a distance of ten to fifteen feet see how many times in ten shots he can knock down peg board set up on edge of table.
- 24. Have him set up a three inch peg in centre of peg board and four others in a square around it, and sitting at a distance of two or three feet, try to ring the pegs with a Ninth Gift whole ring.
- 25. Cut out a large picture from magazine, paste it on a piece of cardboard—top of a box will do—then cut

the picture into irregular shaped pieces, not too small, and have child fit them together (mosaic puzzle).

- 26. Have him make a ball for catching, as follows: Snip a piece of cloth with scissors at intervals of ½ inch, then have him rip it into strips. The these together and wind into a ball. Make it fast with thread and needle or by winding with soft yarn.
- 27. Make a "Spinner" as follows: Cut a circular piece of tin from top of a yeast powder can, punch two holes about half an inch apart, one on each side of the centre, thread a yard of string through the holes and tie the ends together. Grasping a loop in the fingers of each hand with the tin disk on the string half way between, swing the disk with the motion given a jumping rope till the parallel strings are twisted about each other, then pull the hands apart to make the strings unwind, release the pull to allow the strings to twist up in the opposite direction, pull again to unwind and so on. While the disk is rapidly rotating, care should be taken that it is not brought near the face.
- 28. A pile of clean sea shore sand in a large low box or out of doors will afford endless amusement for a child given a spoon, a bottle, a funnel, a cup and toy cake moulds.
- 29. Have him make different colored lanterns as described in Christmas lesson.
  - 80. Have him put butterfly sewing card on reverse

side of a red square. Make dots with a pencil where the holes are, connect dots with lines and cut out.

- 81. Have him make a blue butterfly, as above.
- 82. Have him make a white butterfly as above. Tie different lengths of thread to each butterfly, join the thread to a longer one and fly the butterfly by running with the string.
- 33. Have him cut out a doll's skirt, waist and underwear. String a line across chair arms and hang clothes up to dry, using a bit of card slit 3/4 inch up for a clothes pin.
- 84. Have him make a fan by tacking to a stick the mount on which he has pasted designs in parquetry.
- 35. Have him stick pins in pincushion to make designs similar to those with the peg board or lentils.
- 86. Have him string empty spools or use them for building castles, bridges, forts, etc.
- 87. Cut window openings in a cardboard shoe-box, or crescents, stars and other forms; put candle inside, leaving opening through cover, attach a string and let child draw it around in the dark at night.
- 88. Have him take a strip of newspaper or other paper two or three feet long and four or five inches wide, and fold it end to end, and repeat till one and one-half or two inches wide, then cut as shown below to make a row of paper dolls when opened out. Be careful to have him cut only the dotted lines or the dolls will fall



- apart. A shorter strip is easier cut, but of course there will not be so many dolls.
- 89. Have him fold the paper as above and cut with random forms, leaving however part of each edge uncut to form a connecting link.
- 40. Tear out from the advertisements in magazines, pages on which there are pictures of objects with distinct lines, such as hats, watches, bot-

tles, firearms, houses, automobiles, then have the child place a sheet of carbon paper, dark side down, on a sheet of the drawing paper and the picture on top of both, then go over the outline firmly with a pencil, when the picture will be found produced on the drawing paper. This will be found an almost unending source of interest, and is of great value in training the eye and hand.

- 41. Show the child how to make "Cats' Cradles." It is next to impossible to give written directions for these but, fortunately, almost everyone knows some figures at least.
- 42. Have him fold out of newspaper or manila wrapping paper the forms described in the regular lesson 69 et seq.
  - 43. Have him fold sheets of newspaper in the funda-

mental form described in lesson 95-2 and tear the edges in circular, zigzag and irregular designs, to form lace work centre pieces when opened out. Large sheets of colored tissue paper are easier to tear and are still more attractive. They may be folded still more times before tearing, thus adding to the lace-like effect.

		•	
			•
·			
			·
			4

# **APPENDIX**

Following is a list of materials needed for the course as outlined in the preceding pages. Those that cannot be readily procured at local stores may be had of any dealer in kindergarten supplies, among whom may be mentioned The Milton Bradley Company, Springfield, Mass.; E. Steiger & Co., 25 Park Place, N. Y.; American Kindergarten Supply House, Manistee, Mich. The Calvert School, Inc., 1 W. Chase St., Baltimore, Md., puts up a special outfit of the supplies needed for the course.

A pair of shoe strings.

A gill of lentils.

A skein of heavy worsted (single zephyr) of each of the colors—red, yellow and blue.

A large-eyed, blunt-pointed needle.

A pair of scissors—preferably blunt pointed and not too large.

A soft pencil and ruler.

A box of colored wax crayons.

A paint box of six colors only—red, orange, yellow, blue, violet—and paint brush.

Several pounds of clay from a potter's or other source. It may be obtained directly from the ground in most localities but should be free from vegetable matter and pebbles. Clay dust, oil clay or plasticine is still better, if obtainable.

White or manila paper—with unglazed surface suitable for drawing, coloring, paper folding and cutting.

A scrap book.

Paste or gum tragacanth dissolved in water. The latter has the decided advantage that it leaves no stain.

A sheet of carbon paper—the kind used by typewriters.

One-half inch wooden beads-Mrs. Hailman's red, orange, yellow, green, blue, violet spheres, cubes and cylinders.

Tablets—Seventh Gift—in wood or paper-board (cheaper) squares, right-angle triangles and circles, half light and half dark.

Sticks—Eighth Gift—red, orange, yellow, green, blue, violet, 2 and 3 inches long.

1½ inch steel rings, halves and quarters—Ninth Gift.

Small peg board—with 200 colored pegs of a size that may be inserted in the holes of the wooden beads, mentioned above, and in six colors.

Parquetry paper (gummed), Seventh gift shapes and six colors.

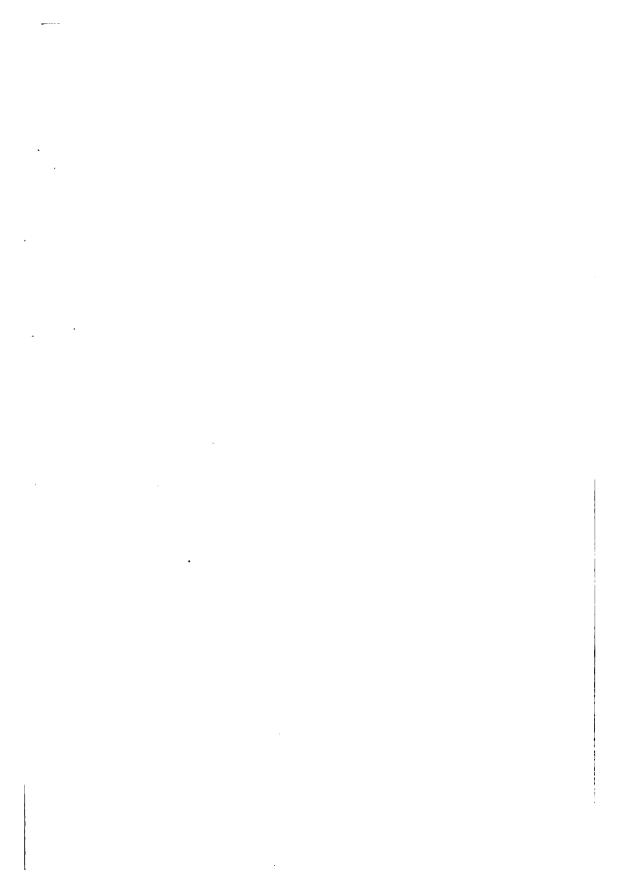
Mounting sheets, stiff white or gray cardboard, about 8x10 inches, ruled in inch squares.

Gray sewing cards, forms—circle, apple, cat, spectacles, lemon, pear, cherries, cup, watering pot, horseshoe, tulip, butterfly, etc.

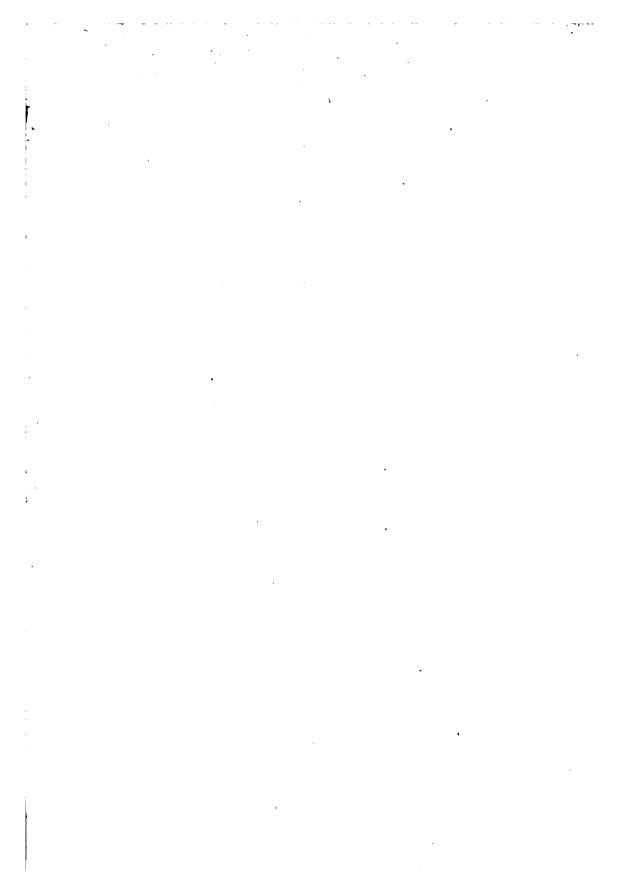
12 mats, for weaving, neutral gray, with slits ½ inch wide and "fringes" of each of the colors—red, orange, yellow, green, blue, violet.

Patent weaving needle.

Red, yellow and blue colored paper for paper cutting and folding.



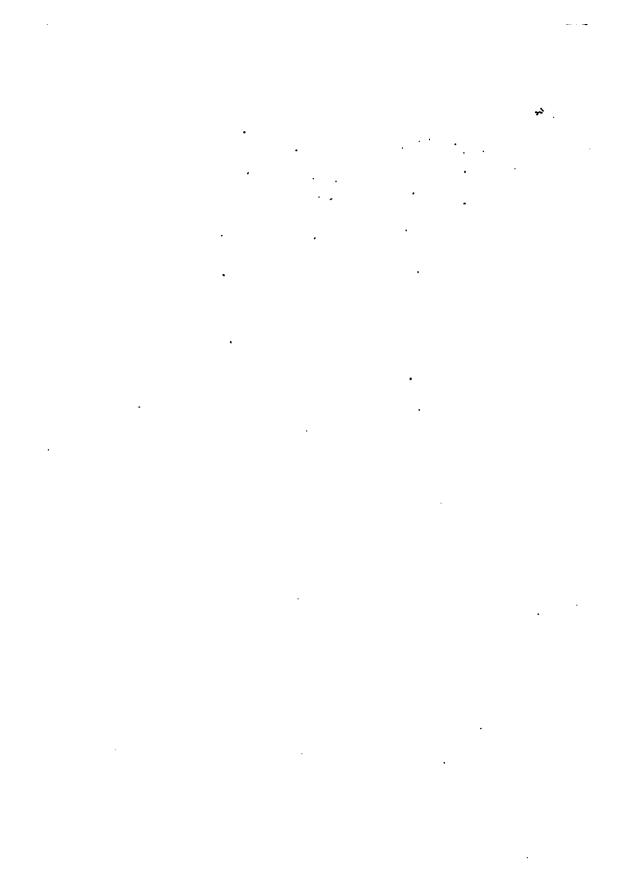




. 







Kindergarten at home; a kindergarte Gutman Library
APANOTI
3 2044 028 904 373